

Public Utilities



Volume 56 No. 5

September 1, 1955

THE TAX COLLECTOR—UTILITIES' SILENT PARTNER

By Sidney P. Allen

« »

Government Regulation of Business: A Challenge to Lawyers

By John B. Prizer

« »

Florida's Phenomenal Phone Progress

By C. E. Wright

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Aids in the Selection of Electric Utility Bonds
Reaction to FPC Decision on Hell's Canyon
Union versus Company Publications

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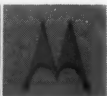
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ARTICLES

- The Tax Collector—Utilities' Silent Partner Sidney P. Allen 299
- Government Regulation of Business:
A Challenge to Lawyers John B. Prizer 305
- Florida's Phenomenal Phone Progress C. E. Wright 315

FEATURE SECTIONS

- Washington and the Utilities 323
- Wire and Wireless Communication 327
- Financial News and Comment Owen Ely 330
- What Others Think 339
- Aids in the Selection of Electric Utility Bonds 339
- Reaction to FPC Decision on Hell's Canyon 341
- Union versus Company Publications 345
- The March of Events 349
- Progress of Regulation 355
- Pages with the Editors . 8 • Remarkable Remarks . . 14
- Utilities Almanack . . . 297 • Frontispiece 298
- Industrial Progress . . . 27 • Index to Advertisers . . 44

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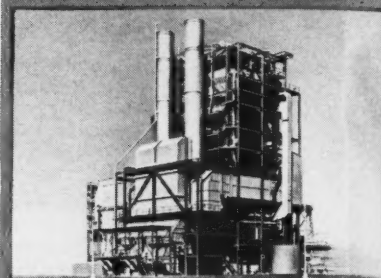
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54 REASONS WHY ELECTRICITY IS AMERICA'S BEST BARGAIN

During the year of 1954 America's electric utilities broke all records in placing nearly 12 million kilowatts of new, highly-efficient generating capacity on the line. Over 6 million kilowatts of this new capacity are served by Babcock & Wilcox boilers. This is the greatest boiler capacity ever placed in operation during any year by a single boiler manufacturer.

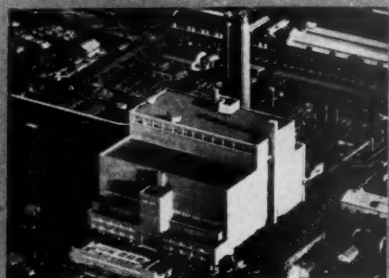
Pictured here and on the following pages are the 54 stations in which one or more B&W boilers were placed in operation in 1954.



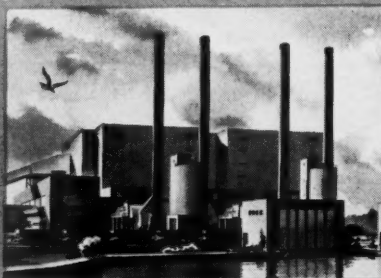
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Cecil S. Lynch North Little Rock, Ark.



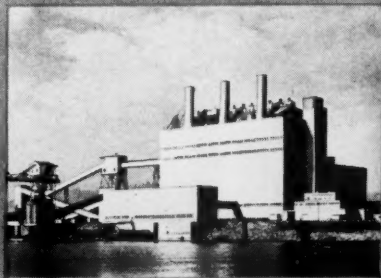
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Ross Beach Hill City, Kans.



Consolidated Edison Co.
Astoria New York, N. Y.



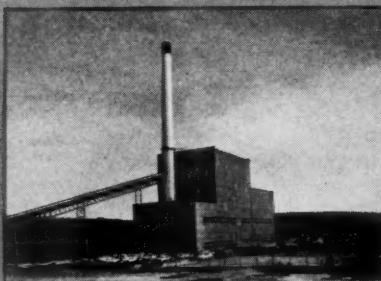
Detroit Edison Co.
St. Clair Detroit, Mich.



Duquesne Light Co.
Etramo Etramo, Pa.



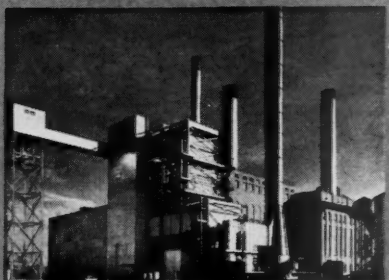
City of Greenwood, Miss.
City Plant Greenwood, Miss.



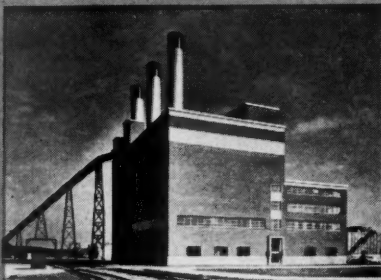
Hartford Electric Light Co.
Middletown Middletown, Conn.



Hawaiian Electric Co.
Honolulu Plant Honolulu, Hawaii



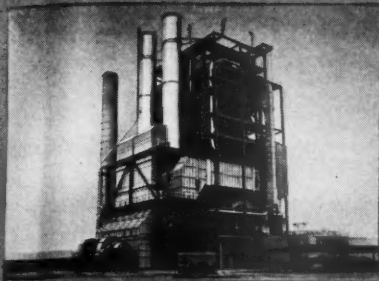
Iowa Power & Light Co.
Des Moines Des Moines, Iowa



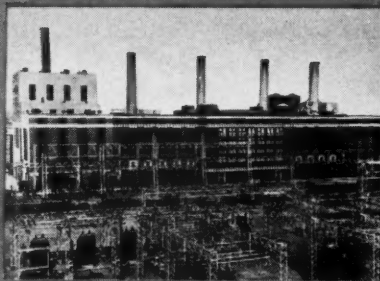
Iowa Southern Utilities Co.
Eddyville Eddyville, Iowa



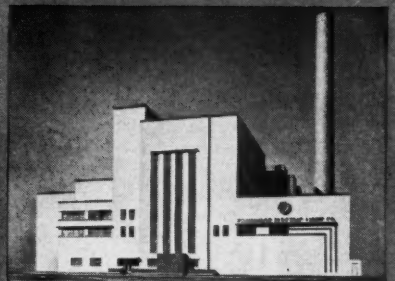
Kentucky Utilities Co.
Green River So. Carrollton, Ky.



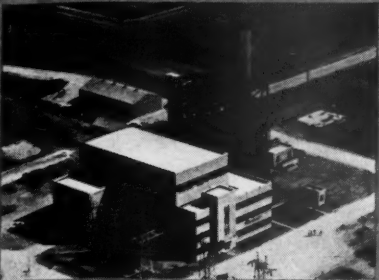
Arkansas Power & Light Company
Harvey Couch Stamps, Ark.



Atlantic City Electric Company
Deepwater Deepwater, N. J.



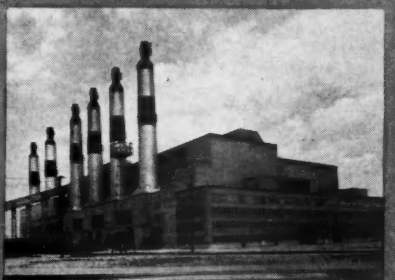
Cambridge Electric Light Co.
Kendall Square Cambridge, Mass.



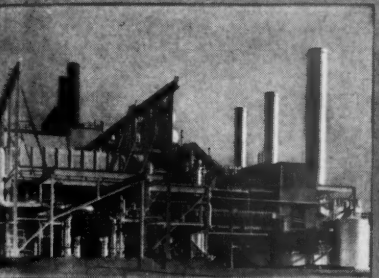
Central Power & Light Co.
Lon C. Hill Lon Hill, Tex.



Cincinnati Gas & Electric Co.
W. C. Beckjord New Richmond, Ohio



Commonwealth Edison Co.
Ridgeland Stickney, Ill.



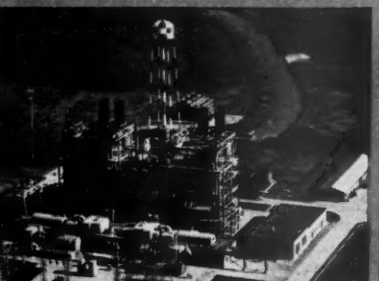
El Paso Electric Co.
Rio Grande El Paso, Tex.



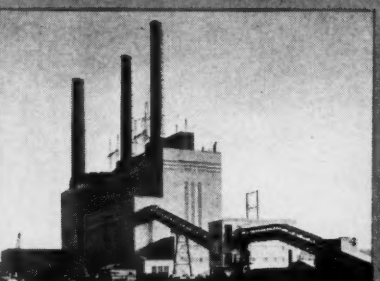
Florida Power Corp.
Savannah River Ellaville, Fla.



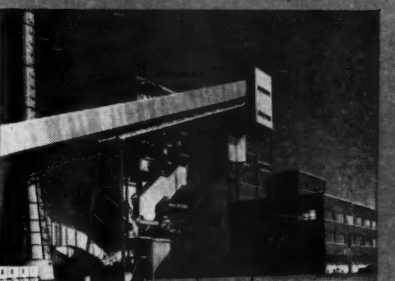
Georgia Power Co.
Plant Hammond Rome, Ga.



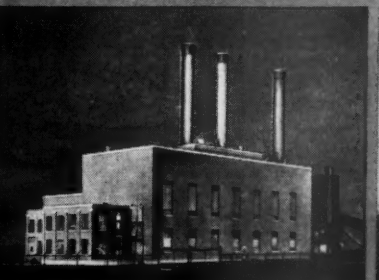
Houston Lighting & Power Co.
Webster Webster, Tex.



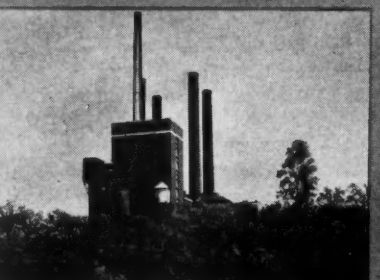
Indiana & Michigan Electric Co.
Tanners Creek Lawrenceburg, Ind.



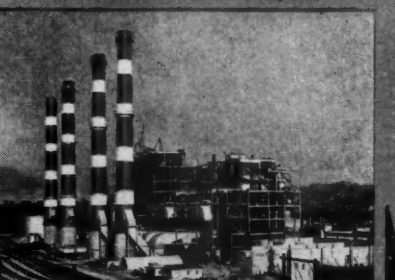
Iowa Power & Light Co.
Council Bluffs Council Bluffs, Iowa



Lake Superior District Power Co.
Bay Front Ashland, Wis.

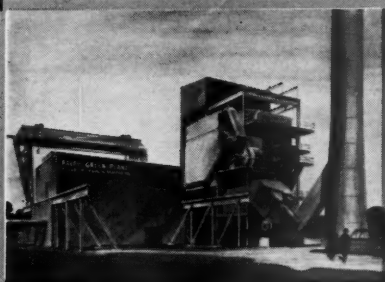


City of Lansing
Moore's Park Lansing, Mich.



City of Los Angeles
Valley Los Angeles, Calif.

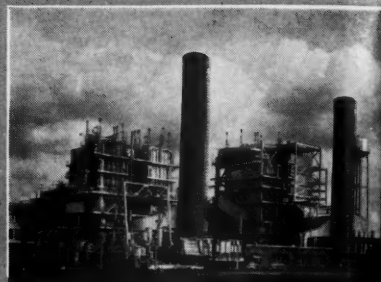
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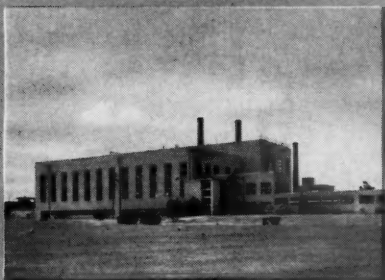
Missouri Public Service Co.
Ralph Green Pleasant Hill, Mo.



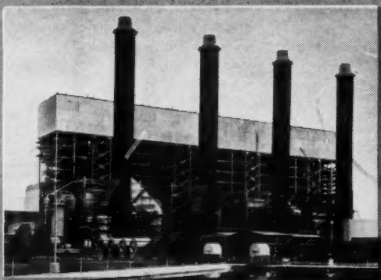
New England Electric System
South Street Providence, R. I.



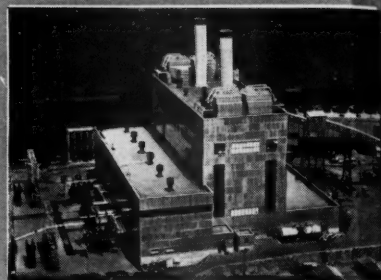
New Orleans Public Service Inc.
A. B. Paterson New Orleans, La.



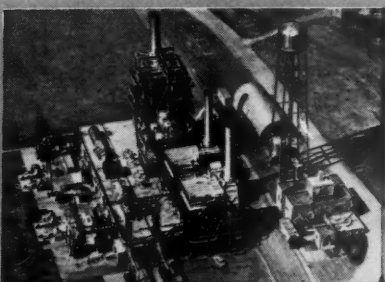
Orlando Utilities Commission
Orlando Orlando, Fla.



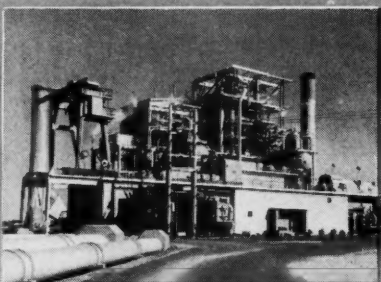
Pacific Gas & Electric Co.
Pittsburg Pittsburg, Calif.



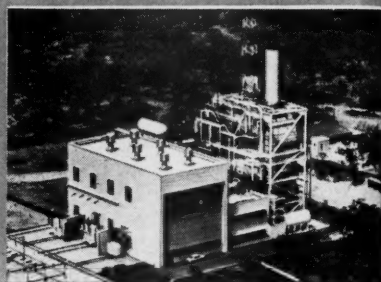
Pennsylvania Electric Co.
Shawville Shawville, Pa.



P.S. Co. of Oklahoma
Southwestern Washita, Okla.



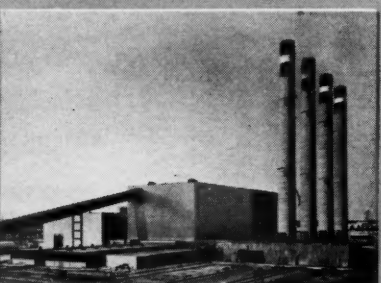
Salt River Power District
Kyrene Tempe, Ariz.



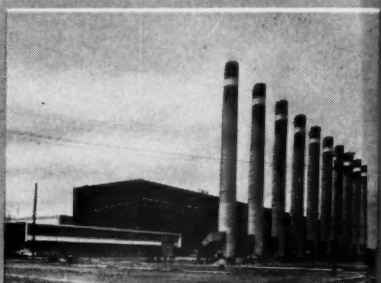
City P.S. Board, San Antonio, Tex.
Northside San Antonio, Tex.



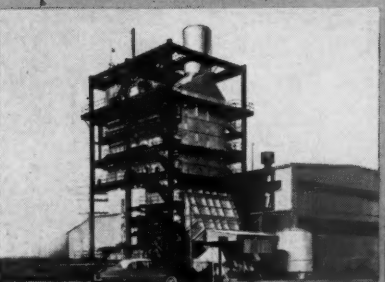
City of Tallahassee
St. Mark's Tallahassee, Fla.



Tennessee Valley Authority
Colbert Tusculumbia, Ala.



Tennessee Valley Authority
Shawnee Childs, Ky.



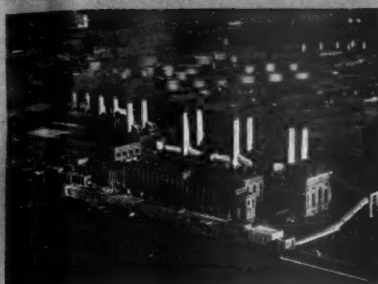
Tucson Gas, Elec. Light & Power Co.
De Moss Patrie Tucson, Ariz.



West Penn Power Co.
Springdale Springdale, Pa.



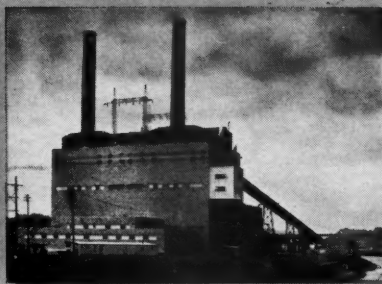
Wisconsin Power & Light Co.
Rock River North Beloit, Wis.



Niagara Mohawk Power Corp.
Huntley Buffalo, N. Y.



Ohio Edison Co.
Niles Niles, Ohio



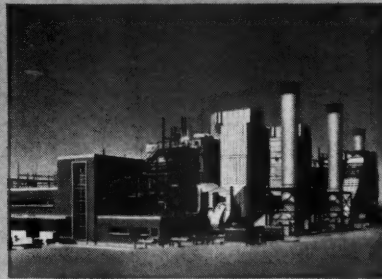
Ohio Power Company
Muskingum River Beverly, Ohio



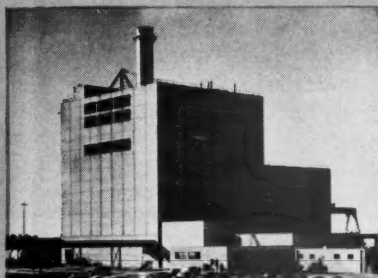
Philadelphia Electric Co.
Cromby Phoenixville, Pa.



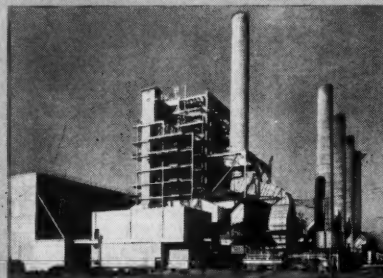
P.S. Co. of Colorado
Zuni Denver, Colo.



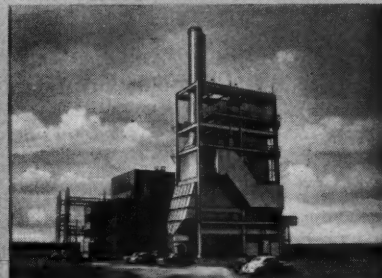
P.S. Co. of New Mexico
Person Albuquerque, N. Mex.



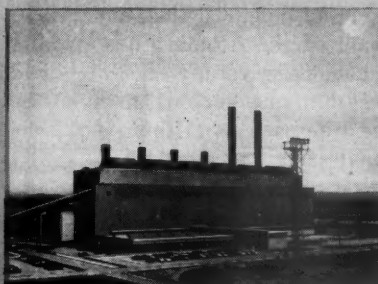
San Diego Gas & Electric Co.
Encina Carlsbad, Calif.



Southern California Edison Co.
Redondo Beach Redondo Beach, Calif.



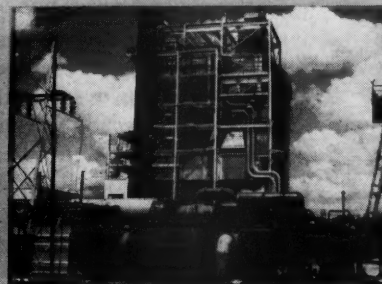
Southwestern Gas & Electric Co.
Lone Star Morris County, Tex.



Tennessee Valley Authority
Widow's Creek Bridgeport, Ala.



Utility
Southwestern United States



Texas Power & Light Co.
Rivercrest Red River County, Tex.



Wisconsin Public Service Corp.
Weston Rothschild, Wis.

A continuing B&W program of intensive research and development in combustion and steam generation, with the cooperation of the Nation's electric companies, has made possible many major advances resulting in more efficient production of electricity. B&W Units installed during 1954 represent an important part of the contribution toward lower cost power.

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Pages with the Editors

ONE cannot help but be intrigued by the prediction made at the opening of the first International Conference (Geneva, August 8, 1955) on the Peaceful Uses of Atomic Energy by Professor Homi J. Bhabha of India, president of the conference. He predicted that within the next two decades man will tame the hydrogen bomb and harness its energy to provide a limitless source of industrial power.

LEAVING to one side scientific and economic argument as to whether Professor Bhabha's prediction is too optimistic in point of timing, the possible impact on utility industries of the future is clearly apparent. No longer would the lack of solid fuels frustrate electric power development in those areas or countries which do not have them. No longer would the presence or absence of hydroelectric sites exercise a limitation on such developments. Over the long range, one can easily foresee changes in store for other industries, including public utilities now engaged in providing fuel for heating service.

AND even though substitution of atomic fuel for solid fuels (or hydro) would account for only a small fraction of the component cost of present-day electric service distributed to the ultimate customer, who can tell what these future developments will mean in the way of changing the organization of our present-day electric power services and their distribution?

YES, the availability of "limitless power" is a challenging thought—one which reaches into other areas of public service—transportation by land, sea, and air. The repercussions could easily be felt in great changes in many nonutility industrial operations. The world factories of the future may not have to be tied down to places which have access to conventional fuel of any sort. Fortunately for the security of our own American competitive



SIDNEY P. ALLEN

economy in any industrial revolution which may lie ahead, there is reason to believe that the "know-how" of American industry is in the forefront of such planning and development.

ON the same day that the Soviet delegate was speaking at the Geneva conference of a 5,000-kilowatt plant at an unnamed location using an unnamed fuel, a 10,000-kilowatt plant of the Atomic Energy Commission had, for several weeks, been feeding power into the lines of an electric distributing utility at West Milton, New York. On that same day the AEC also approved plans for a group of electric utilities, headed by Detroit Edison, to build a nuclear plant to produce 100,000 kilowatts in the Detroit area by 1959, and another plant by a group headed by Commonwealth Edison to develop a 180,000-kilowatt plant in the Chicago area by 1960.

WITH other plans by other groups in other areas rapidly coming along to the point of actual licensing and construction, it would seem that the atomic industrial revolution, as far as the electric utility industry is concerned, is not something to look forward to in the future. It is here today. The phase is rapidly passing from



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the drawing board to the bulldozer and concrete-pouring operations.

As long as our American industry, both manufacturing and operating, together with research operation and government assistance, can keep in the forefront of these developments, just so long can the American people feel confidence in America's place in the atomic age, regardless of enigmatic pronouncements and claims of advancement from the other side of the Iron Curtain. The principal danger at present would seem to lie in the temptation on the part of some of our political figures to imitate the Iron Curtain country techniques by driving out or discouraging private industry participation in this picture and promoting a government monopoly which could be just as repressing to free thought and free action as anything a dictator could order.

THE "public interest" in this matter would seem to be best protected by the same system which has for more than half a century successfully protected such interests in the public service of the American people. That is fair, sound, and reasonable state and federal regulation of operations and developments by free private enterprise. Under this system public utility service in the United States has developed into the finest and best patronized in the whole world, far ahead of the developments in any other country depending on socialized utility services or other forms of government monopoly. The same progress could happen in our peacetime development of atomic energy for public service.

OVER the long range, probably the most difficult single problem of keeping public utility regulation going along on an even keel is the task of maintaining a balance between the preservation of free private enterprise and the maintenance of the right degree of government regulation of such enterprise. Beginning on page 305 we have a thoughtful and philosophical review of the reasons behind public utility regulation from the very beginning. Our author is JOHN B. PRIZER, general counsel of The Pennsylvania Railroad. It is in substance a restatement in article form



C. E. WRIGHT

of a paper originally prepared for a rather exclusive professional audience, the St. Louis Bar Association.

* * * *

THE opening article in this issue discusses the tax collector's rôle, which has been imposed more and more by various reforms of government authority on the different public utilities. The author of this article is SIDNEY P. ALLEN, financial editor of *The San Francisco Chronicle*. He first joined the *Chronicle* in 1933 and has been writing on business and financial economics since that time. During World War II he served for a short while with the old WPB Office of War Utilities in the nation's capital.

* * * *

IN Florida everything grows fast, from plants to population, but apparently the sunny climate of the Peninsular state has had a phenomenal effect on growing more telephone poles and telephone stations. Beginning on page 315, C. E. WRIGHT, professional author of Jacksonville, Florida, has made a factual investigation of Florida's burgeoning telephone industry, both for the Bell system and independent companies.

THE next number of this magazine will be out September 15th.

The Editors

Cranky in more ways than one



It took plenty of "elbow grease" to operate this oldtimer. Like so many other old-fashioned hand operations it has been supplanted by a machine which can turn out the product faster and more economically.



WHEN IT comes to the compilation of figures, it's just plain good sense to abandon hand operations in favor of machine tabulation. Take the important project of rate analyses for example—there's no need to compile these figures in your office, tying up personnel and office machines, when you can farm out the job to us and get it much faster and cheaper. Our "Bill Frequency Analyzer" can analyze between 200,000 and 300,000 bills a

day and do the work in "One Step".

We can prove to you conclusively that the "One Step" method will save you 50% in cost and untold hours of time. Send us a sample of your billing sheet, a copy of rate schedules and an estimate of the number of customers billed on each rate and your frequency table requirements. We'll give you an estimate of costs *without charge!*

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Coming IN THE NEXT ISSUE



LESSONS TO BE LEARNED FROM DIXON-YATES

Overlooked in the turmoil of the cancellation of the controversial Dixon-Yates contract for supplanting TVA power from a private utility source was the fact that such action was entirely consistent with the President's repeated views on local responsibility for power supply. This article by the Honorable George A. Dondero, U. S. Representative from Michigan and ranking minority leader of the House Public Works Committee, analyzes the lessons which can be learned from the Dixon-Yates episode. The President has said repeatedly that he is in favor of "do it yourself" programs for cities such as Memphis which have been heretofore dependent entirely on the federal government for power supply. When Memphis showed that it could and would free itself from dependence on TVA, a whole new approach to the problem posed by the growing demands on TVA power supply was opened up. Congressman Dondero has analyzed the situation in the light of valuable lessons to be learned from Dixon-Yates. He sketches five guiding principles to be followed in solving the problems of TVA's future.

SELECTING FUTURE MANAGEMENT

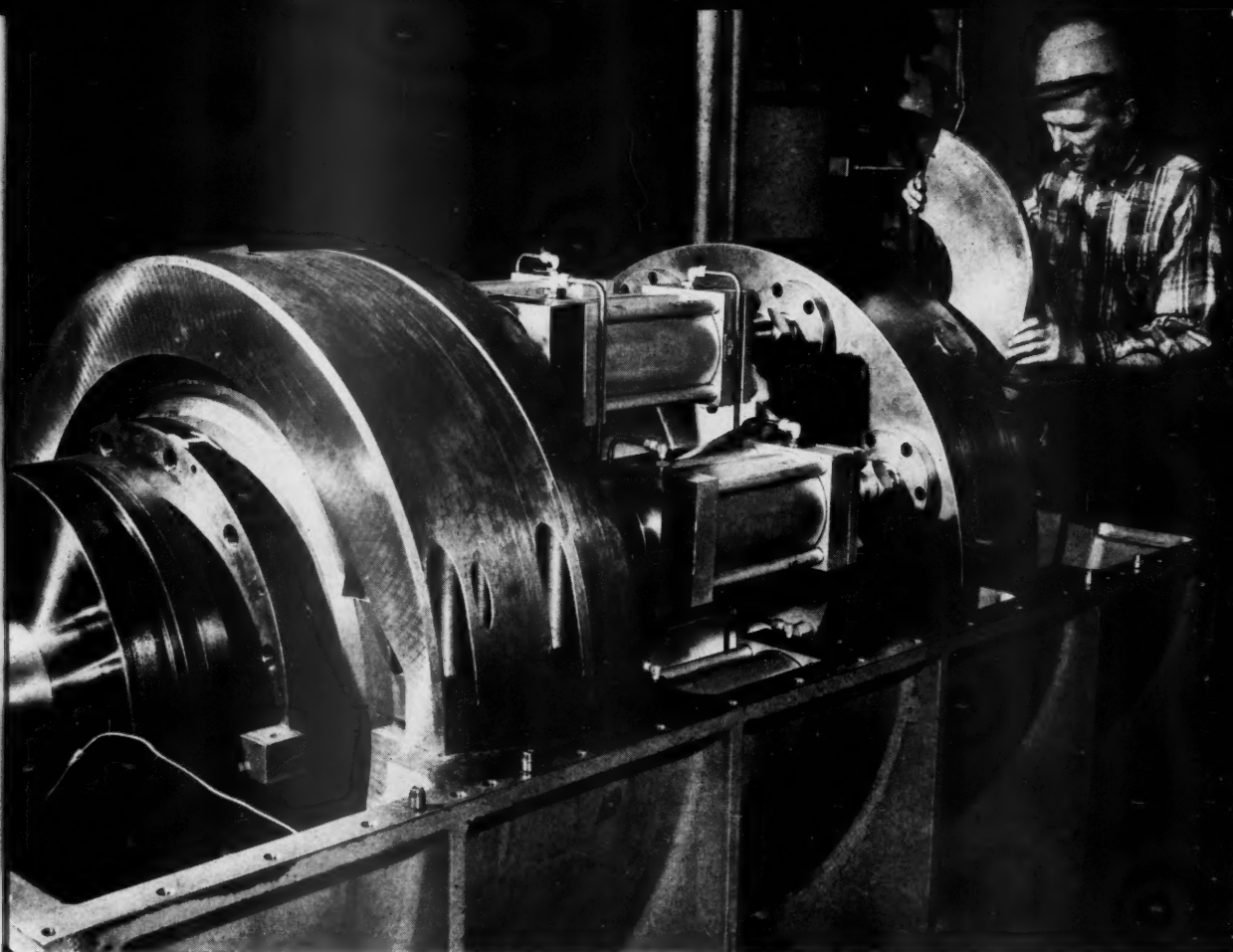
Many utility companies have had experience with various and sundry management development programs in an effort to grow adequate and prompt replacements for existing management. F. L. (Bud) Larkin, vice president of the Wisconsin Electric Power Company, has given us an interesting account of the results of research for a new set of tools to aid in the selection of people for management and to measure the human attributes on critical requirements. He treats of ratings, interviews, and tests—the three measuring devices—and the five objective measurements of personal attributes. These and other details of evaluating the management candidate on the job will be found to add up to both a thoughtful and rewarding article. Many readers will probably wish to retain this valuable analysis for periodical future reference.

PUBLIC RELATIONS—THE INVISIBLE GIANT

The very intimate contact of public utility operations with the daily lives of the entire population underscores the importance of continued and concentrated application of the best thoughts and techniques of sound and improved public relations. Booth Mooney, public relations consultant of Texas, who is now a staff member of the Senate Democratic Policy Committee, has written a stimulating discussion as to the responsibility of public utility industries in keeping open two-way communication between management and the public in various problems so easily misunderstood or susceptible to misinterpretation.



Also . . . Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.



How much can a thrust bearing take?

Extensive tests punish G-E turbine bearings with loads equal to the weight of the Statue of Liberty

During normal operation of a modern turbine-generator, thrust bearings must absorb tremendous loads. In addition, they may have to withstand abnormal loads caused by deposits in the steam path or, in rare cases, water carryover from the boiler.

In developing reliable thrust bearings, General Electric engineers use the special test machine shown above which is capable of testing bearings 50 percent larger than any now in service. The device, operating at speeds of 1800 rpm or 3600 rpm, can impose thrust loads up to 450,000 pounds—equivalent to the weight of the Statue of Liberty. Thrust loads, oil and babbitt temperatures, and oil film pressures and thicknesses

are measured under conditions exceeding those that might be encountered in actual operation.

These tests have uncovered information about the causes of bearing failure, thus enabling engineers to design with confidence the thrust bearings of the future. They have also reconfirmed the dependability of the tapered-land thrust bearings used on General Electric's biggest turbine-generators. The testing of thrust bearings is one more example of the thorough research and development programs which are the basis of all turbine-generators General Electric builds. General Electric Company, Schenectady 5, N. Y.

254-24

Progress Is Our Most Important Product

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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

GUY FARMER
*Chairman, National Labor
Relations Board.*

"There is no collective bargaining substitute for patience, intelligence, and common sense."

DAVID SARNOFF
*Chairman of the board, Radio
Corporation of America.*

"Labor-management unity has ceased to be a luxury. In the framework of the world today it is an irreducible necessity."

LEWIS D. CRUSOE
*Executive vice president, car
and truck division, Ford
Motor Company.*

"The purpose of the antitrust laws . . . is not to guarantee success to individual competitors. The purpose, rather, is to preserve competition for the benefit of consumers."

HOLMES ALEXANDER
Columnist.

"This whole notion that better politicians and bureaucrats can be hired with more money is one for the loonybin. Anybody who goes into politics for money is a crook or a ne'er-do-well."

EDITORIAL STATEMENT
Los Angeles Times.

"The only practical control over spending which now remains in the hands of Congress is the debt limit. But that's not the sort of control of the purse which is prescribed in the Constitution."

KEITH FUNSTON
*President, New York Stock
Exchange.*

"We face the necessity of urging the federal government to remove or lessen those formidable investment barriers—high progressive income taxes, capital gains, and the double tax on dividends—that destroy incentives for individual investment."

SAMUEL B. PETTENGILL
Attorney, Pure Oil Company.

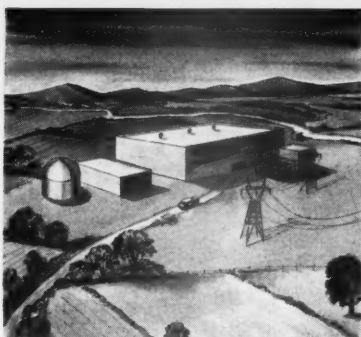
"Two cents a day is all that natural gas producers receive from the nation's average residential consumer. This basic fact destroys the arguments of politicians who claim that the public will be gouged if the production of gas is returned to free market competition."

F. D. TELLWRIGHT
*Vice president, Pacific Telephone
& Telegraph Company.*

"The quality of your product or your service is an essential foundation to any program of public relations. Public relations can be no better than the product or the service . . . Next in importance is the attitude on the part of the employees from the janitor to the president."

CHARLES E. WILSON
Secretary of Defense.

"By accepting the challenge of individual competition we have done a better job of applying our human energy and individual initiative to the improvement of the welfare of all. This is why I am so sure that our free society is the best and will ultimately prevail in other lands when other peoples have the opportunity to develop in a similar pattern."



Pioneering New Horizons
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today for peaceful
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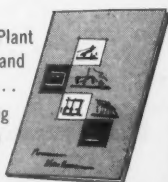


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Needs of Industries and
Utilities for 53 years...

Our booklet, "Pioneering
New Horizons," describes the
complete services we offer.





Completely New

DESIGNED TO YOUR NEEDS!

DIVCO

"DIVIDEND SERIES"

THE ONLY COMPLETE TRUCK BUILT TO FIT ALL THE
REQUIREMENTS OF MULTI-STOP OPERATIONS



YOU ASKED FOR:



GREATEST CARGO CAPACITY FOR THE MINIMUM OCCUPANCY OF STREET OR GARAGE SPACE. Divco's new "Dividend" Truck provides the extra-cargo capacity you asked for with an inside height of 73" and an inside width of 76" on a 130" wheelbase model that has an overall height of 108" and overall width of 83½". A specially constructed press-swivel driver seat makes for new driver comfort.



YOU ASKED FOR:



A SMOOTHER RIDING VEHICLE. Divco's new "Dividend" Truck provides a ride compared to "passenger car" smoothness. A carefully engineered system of springing and double-acting shock absorbers on all wheels protect your cargo, reduce driver fatigue and cut down on maintenance costs.

World's Largest Manufacturer Of Complete House-To-House Delivery Trucks

The Truck Best Suited
For Retail and Wholesale
Delivery Of
ELECTRIC APPLIANCES

- Extra capacity allows you more cargo per trip for easier, faster, lower-cost delivery of your irregularly-shaped, various-sized, bulky articles.
- Extra ruggedness permits you to carry your heavier loads economically and without undue strain on the vehicle.
- Smoother ride provides greater protection for your fragile merchandise.
- Unusually wide range of options permits adaptation to your particular operation.
- Exceptional interior roominess and low back and side steps increase comfort and reduce fatigue for multi-stop delivery driver.

DIVCO

OVER 80% OF ALL DIVCOS PRODUCED SINCE 1927 ARE STILL IN SERVICE.

Multi-Stop Delivery Truck



This is the 12', 130" wheelbase model of the Divco "Dividend" Truck with Super 6 engine and 4-speed synchro-mesh transmission. The "Dividend Series" will also include a 10', 117" wheelbase model.

★ ★ YOU ASKED FOR: ★ ★

GREATER MANEUVERABILITY. Divco's new "Dividend" Truck takes the sharpest turns in the narrowest alleys with ease. The large 12' model will completely turn around in a 40' street. It is as easily maneuvered as a small passenger car.

★ ★ YOU ASKED FOR: ★ ★

INCREASED VISIBILITY AND STREAMLINED STYLING. Divco's new "Dividend" Truck was designed with a wide, deep windshield which gives the driver visibility exceeding 200 degrees. Added safety has been achieved by increasing driver vision almost to street level in front of the truck. The sharp, clean lines of this new vehicle and its unique bus-like appearance set it apart from all other trucks on the road today.

★ ★ YOU ASKED FOR: ★ ★

GREATER ACCESSIBILITY TO ENGINE AND TRANSMISSION FOR MAINTENANCE. Divco's new "Dividend" Truck provides incomparable simplicity and ease of maintenance. All parts of the power plant are easily reached from the inside of the cab by the simple expedient of removing easy-to-handle access panels. For your protection and convenience, access panel to the engine is treated with sound and heat resistant materials.

IN ADDITION:

The latest technical advancements and improvements in Automotive Design provide you with these bonus features:

- Extra Rugged Chassis
- Adaptability To An Unusually Wide Range Of Optional Features
- Greatest Possible Freedom From Corrosion
- Improved Roadability At All Speeds

Phone your local dealer for full information and a demonstration ride . . . there's no obligation, of course!

TRUCKS

DIVCO CORPORATION, 22000 HOOVER ROAD, DETROIT 5, MICHIGAN



Our new five-day financial seminars...

have been designed to acquaint selected utility officials with the inner workings of New York's financial community.

These seminars are made possible through the help of many financial specialists who give a firsthand account of their particular operations.

In addition, our well-known Public Utilities Round Tables will continue as in former years.

IRVING TRUST COMPANY

One Wall Street, New York 15, N.Y.

Capital Funds over \$125,000,000

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Total Assets over \$1,400,000,000

RICHARD H. WEST, President

Here's Proof of Performance...

Gulf States Utilities counts on over 30 years of service from *pressure-creosoted* poles



• One of the many poles marked with a 1925 dating nail, denoting 30 years of service.



Gulf States Utilities Company, serving 291 communities in southeastern Texas and south central Louisiana, uses pressure-creosoted poles exclusively in more than 10,000 miles of transmission and distribution lines.

"It would be foolish to think of putting an untreated pole in the wet, termite-infested soil of the Gulf Coast area," says John Jordan, operating supervisor. "We have come to expect over 30 years of service from a pressure-creosoted pole."

Gulf States used pressure-creosoted poles in its first inter-city line installed in 1917. Some of these poles are still in use today after removal to other locations.

"First cost of a pole is reason enough to take advantage of Creosote's ability to make poles last," says Mr. Jordan. "But a replacement is even more expensive when you consider it takes 50 to 60 man-hours to make a pole change."

With poles pressure-creosoted for adequate life, neither the utility nor its linemen have cleanliness complaints.

For best performance, from the standpoints of service and cleanliness, specify poles treated with the top-quality preservative—USS Creosote. For more information, contact our nearest Coal Chemical sales office or write directly to United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa.

You can obtain clean pressure-creosoted poles upon specification and with proper inspection without sacrificing pole service life.

SEE THE UNITED STATES STEEL HOUR. A full-hour TV program presented every other week by United States Steel. Consult local newspaper for time and station.

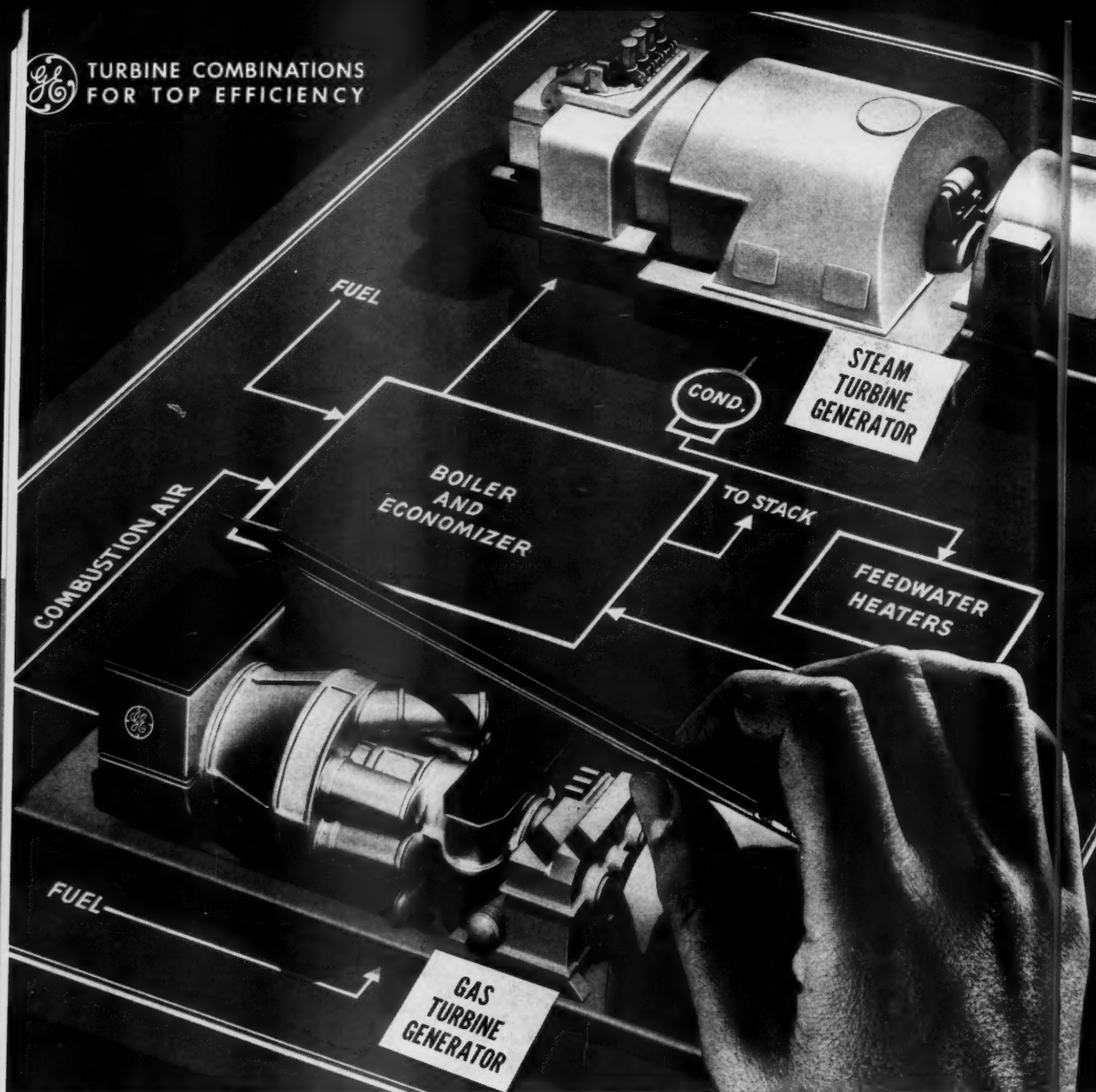
USS CREOSOTE



UNITED STATES STEEL

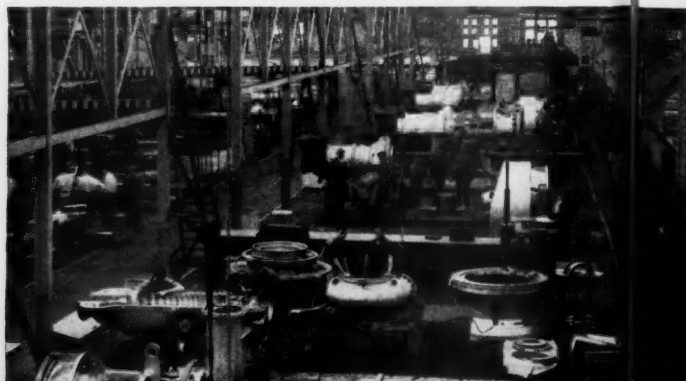
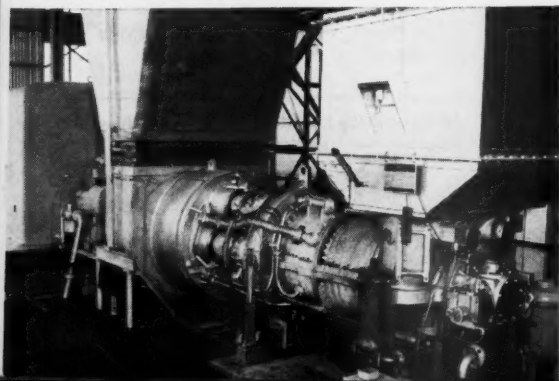


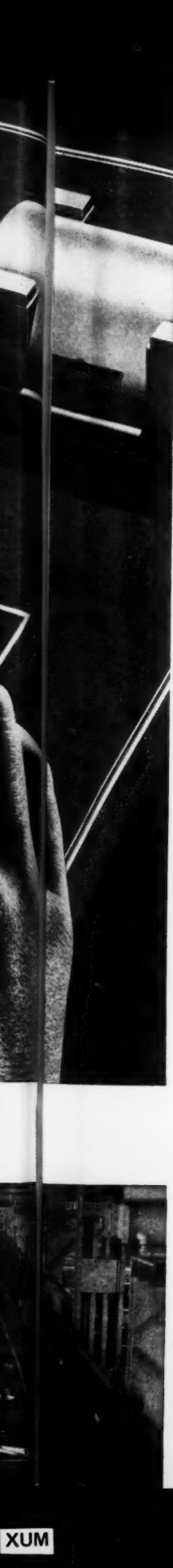
TURBINE COMBINATIONS FOR TOP EFFICIENCY



EXAMPLE OF GAS TURBINE used in a combined gas-steam turbine cycle is shown below installed at a Southwestern utility. Use of gas turbine exhaust for feed-water heating resulted in 15% improvement in station heat rate.

G-E GAS TURBINE PLANT shown below is devoted exclusively to the development and manufacture of commercial gas turbines. General Electric gas turbines have over 730,000 hours of operation to their credit—a world's record.





EFFICIENCY GOES UP when this G-E steam turbine-gas turbine team goes into action. Here, exhaust gas from gas turbine is used as combustion air for steam boilers. Result is 7.5% improvement in system efficiency.

NEW WAY TO IMPROVE HEAT RATE:

G-E gas turbine exhaust used as boiler combustion air

When combined with a steam turbine in a generating plant, the G-E gas turbine can make a significant contribution towards over-all electric generating station efficiency and resulting economy.

IN THE EXAMPLE AT LEFT, exhaust gas from the G-E gas turbine, which retains over 80% of its original oxygen, is used as pre-heated combustion air for fuel-fired steam boilers. The gas turbine itself drives a generator in parallel with the main turbine-generator.

TAKE A 6000-KW GAS TURBINE, for example. It provides all the combustion air required for a boiler supplying 1250-psig, 950 F steam for a 40,000-kw condensing steam turbine. Net heat rate for such a

plant would be 10,760 Btu/kwh as contrasted to 11,630 Btu/kwh for a steam plant without a gas turbine. The improvement is 7.5 per cent.

IN DOLLARS AND CENTS, that represents a \$60,000 per year saving as a result of using a gas-steam turbine cycle (based on 70% plant factor, 15% gross fixed charges, and 25¢/million Btu for fuel).

SIMILAR ECONOMIES ARE obtainable with other gas-steam turbine cycles. For details on the arrangement most useful to you, contact your G-E Apparatus Sales Representative, or write for Bulletin GER-1026. Address Section 261-5E, General Electric Company, Schenectady 5, New York.

Progress Is Our Most Important Product

GENERAL  **ELECTRIC**

PREPARE NOW FOR TOMORROW'S IN SWITCHING DISTRIBUTION

It's a matter of simple addition to get this modern device for the switching of distribution feeders . . . because an S&C Load Interrupter consists of an interrupting unit added to a disconnect switch.

And with an S&C Load Interrupter you can switch the modern way. You can drop the load—all of it—at once. No need to go through complicated unloading preliminaries—no need to open main breakers causing otherwise unnecessary interruptions. Outages are held to a minimum—line repairs can go forward immediately.

In addition, you can switch the circuit any time under any condition (except short circuit) . . . valuable protection against inadvertent operation or op-

eration under emergency conditions. Switching with S&C Load Interrupters cannot lead to dangerous phase-to-phase or phase-to-ground faults. It cannot endanger men or equipment because there is no external arc.

If you've been delaying the use of S&C Load Interrupters because of budgets, remember that you can install S&C Convertible Disconnects *without* the interrupting units at the same price as conventional disconnects. Then, when you're ready to convert, you can quickly install the low-priced interrupting units with a hot line tool *without de-energizing the circuit*.

Ask your nearest S&C sales representative for information.



Specialists in High-Voltage Circuit Switching Since 1910

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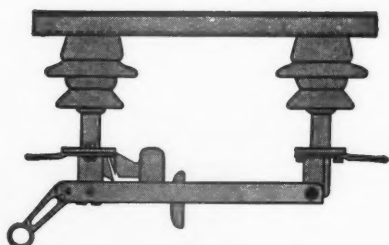
Ontario

SWITCHGEAR, DISTRIBUTION EQUIPMENT AND ACCESSORIES

LOAD INTERRUPTERS

REARCLAD SWITCHGEAR

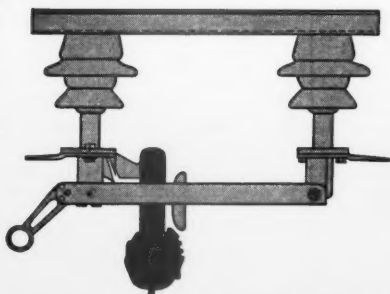
PROBLEMS FEEDERS



S&C CONVERTIBLE DISCONNECT



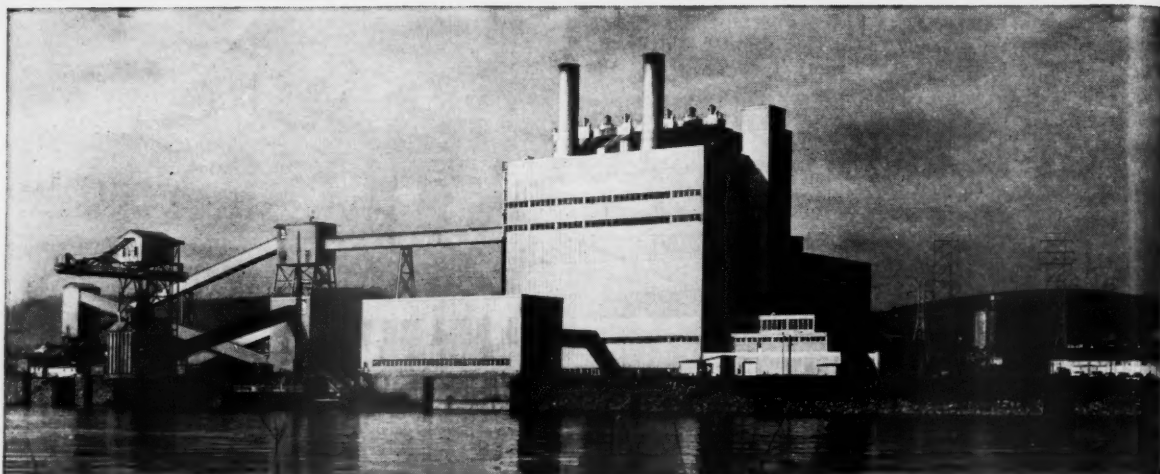
INTERRUPTING UNIT



S&C LOAD INTERRUPTER

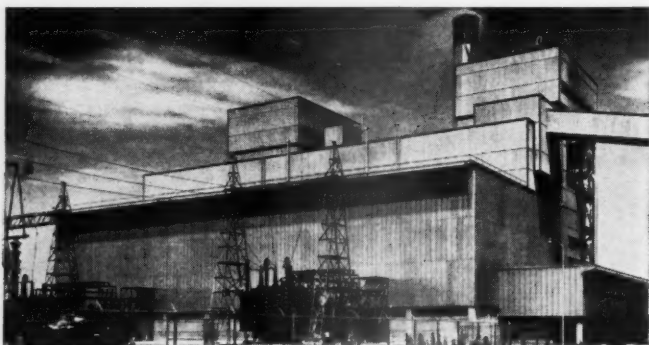


Section 760 tells in
the S&C Load In-
terrupter operating
and saves money.



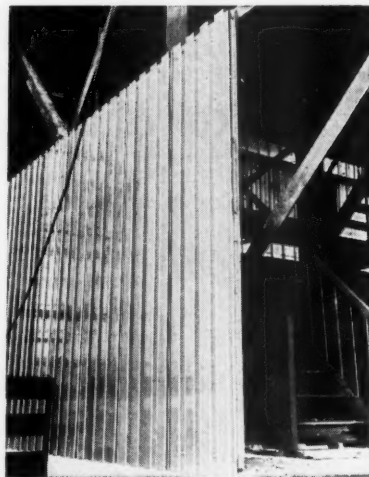
Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12" masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Robertson
Q-Panels
H. H. Robertson Company
 2400 FARMERS BANK BLDG. • PITTSBURGH 22, PA.
 Offices in Principal Cities

Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.

More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.



Please send a free copy of your Q-Panel Catalog.

NAME _____

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PUBLIC UTILITIES FORTNIGHTLY—SEPTEMBER 1, 1955

UTILITIES

A.l.m.a.n.a.c.k

SEPTEMBER

<p>Thursday—1</p> <p><i>American Water Works Association, Rocky Mountain Section, will hold annual meeting, Laramie, Wyo. Sept. 19-21. Advance notice.</i></p>	<p>Friday—2</p> <p><i>International Association for Hydraulic Research ends meeting, Delft, Netherlands.</i></p> <p></p>	<p>Saturday—3</p> <p><i>Society of Industrial Packaging and Materials Engineers will hold tenth anniversary meeting, New York, N. Y. Sept. 19-22. Advance notice.</i></p>	<p>Sunday—4</p> <p><i>Pennsylvania Electric Association will hold annual meeting, Philadelphia, Pa. Sept. 20, 21. Advance notice.</i></p>
<p>Monday—5</p> <p><i>Oklahoma Utilities Association, Gas Division, will hold one-day meeting, Oklahoma City, Okla. Sept. 23. Advance notice.</i></p>	<p>Tuesday—6</p> <p><i>International Gas Union will hold conference, New York, N. Y. Sept. 25-30. Advance notice.</i></p>	<p>Wednesday—7</p> <p><i>Mid-West Gas Association begins gas school and conference, Ames, Iowa.</i></p>	<p>Thursday—8</p> <p><i>Michigan Independent Telephone Association begins annual convention, Grand Rapids, Mich.</i></p>
<p>Friday—9</p> <p><i>New Jersey Gas Association begins one-day meeting, Spring Lake, N. J.</i></p> <p></p>	<p>Saturday—10</p> <p><i>American Transit Association will hold annual meeting, Boston, Mass. Sept. 26-29. Advance notice.</i></p>	<p>Sunday—11</p> <p><i>Independent Natural Gas Association of America begins annual meeting, Jasper National Park, Jasper, Alberta, Canada.</i></p>	<p>Monday—12</p> <p><i>Instrument Society of America begins annual conference and exhibit, Los Angeles, Cal.</i></p>
<p>Tuesday—13</p> <p><i>Edison Electric Institute-American Gas Association begin accounting division organization meetings, Cincinnati, Ohio.</i></p>	<p>Wednesday—14</p> <p><i>Rocky Mountain Electrical League ends 4-day annual fall convention, Jackson Hole, Wyo.</i></p>	<p>Thursday—15</p> <p><i>Public Utilities Association of the Virginias begins annual meeting, White Sulphur Springs, W. Va.</i></p>	<p>Friday—16</p> <p><i>Maryland Utilities Association begins fall conference, Virginia Beach, Va.</i></p> <p></p>



Modern Utility Offices—Clearwater, Florida

Public Utilities

FORTNIGHTLY

VOL. 56, No. 5



SEPTEMBER 1, 1955

The Tax Collector—Utilities' Silent Partner

For years the public utilities of this nation have been cast in the rôle of publicans by various government agencies for the simple reason that the monthly bill for public utility service is an ideal tax collector. It is not a happy rôle for the public utilities, nor a willing one.

By SIDNEY P. ALLEN*

THERE is one sentence in the 1954 annual report of Southern California Edison Company that is calculated to hit stockholders smack in the eye. It reads:

Taxes were the company's largest single classification of expense for the sixth consecutive year.

That's truly a shocking revelation.

*Financial editor, *The San Francisco Chronicle*, San Francisco, California. For additional personal note, see "Pages with the Editors."

Not to utility executives, perhaps, because they have lived with and struggled with taxes long enough to have built up some immunity to the harsh realities.

But most surely it will be a blow to stockholders, even to the point of quelling some of the budding enthusiasm for stock ownership by a new segment of the public.

For it makes crystal clear the point that the company and its owners (stockholders) are working for the benefit of the tax collector first of all.

PUBLIC UTILITIES FORTNIGHTLY

His interests, in the case of this company, even come ahead of owner benefits.

That is disturbing enough. But it is not the half of it.

It puts taxes emphatically within the category of regular and growing expense. The heavy hand of the tax man is now accepted as a major part of operating costs.

Is the Southern California Edison Company an exception among West coast utility companies?

Not in the least!

Stockholders have that word, if they will just read it.

But the users of utility services (consumers) generally do not. They are not conscious of how consistently the tax man slips in on them, or just how heavy handed he really is.

Perusal of the reports of just four of the largest California utility companies—Pacific Telephone & Telegraph Company, Pacific Gas and Electric Company, Southern California Edison Company, and Pacific Lighting Corporation—offers plenty for those consumers to ponder. For instance:

1. TALK is not cheap. It can't be. It is taxed too heavily.

Last year Pacific Telephone & Telegraph Company paid \$109,000,000 of taxes for itself, and in addition collected another \$60,000,000 of excise taxes from its telephone users in behalf of the tax man.

That makes a total of \$169,000,000 of taxes on talk, as levied through one western company in one year.

Every telephone user paid some part of that load, and every word carried its levy. The user should hear that word.

The total sum of \$169,000,000, inci-

dentally, adds up to more than one-fourth of the total amount of all revenue taken in by the company last year. And it amounts to about \$33 for each and every one of the Pacific Telephone & Telegraph Company phones in use.

Whether he knows it or not, naturally the user pays this tax load. For this company—and any company—has just one source of revenue. It gets its money from its customers.

The telephone company report indicated one difference from the Southern California Edison Company. It was conveyed in the following interesting little notation:

Next to wages, operating taxes are the biggest drain on our revenues.

That is significant to this extent: Pacific Telephone & Telegraph Company was (and is) one of the largest employers of people in the West and in the nation. It was far and away the largest employer among western utility companies.

LAST year it had a regular payroll of 77,000 people. Naturally, then, it had a wage bill well above the \$109,000,000 of operating taxes.

It would be a wonder if it did not. For the growth of population in the company's territory has put everything under a forced draft when it comes to expansion.

For example:

Pacific Telephone hooked up 297,000 new telephones (net) to its lines in 1954. It strung thousands of miles of new cable, installed hundreds of miles of new line, set up new exchanges, and met the hundred and one other demands made upon it.

These included such dramatic emergency demands as the speedy restoration

THE TAX COLLECTOR—UTILITIES' SILENT PARTNER

of service arising from a severe earthquake in Eureka, among other things.

An idea of the company's activity can be gleaned from a figure: Its construction costs last year totaled \$231,000,000.

So obviously it needed its 77,000 employees. Wages as its number one item of operating expense is perfectly understandable.

But taxes as its number two item of operating expense might well be construed as a kind of penalty levied on talk. This penalty might seem excessive when it is recalled that the rates charged for phone service are subject to close regulation.

Are the talkers (consumers) aware of this penalty on them whenever they dial the phone?

Are they conscious of the fact that the tax man gets two and a half times more out of the phone company than its owners get in the form of carefully controlled and regulated net earnings? Or that he gets three times more than the owners get in dividends?

You might conclude that the tax man is the telephone company's "silent partner"—who gets the most out of your conversation.

2. OTHER utility companies have "silent partners" too.

Pacific Gas and Electric Company, for

instance, paid total property taxes of \$41,272,764 to 49 counties, 192 cities, and more than 1,500 school and other special districts for the past year.

That was a new record high for the company.

So was the total of all taxes paid by the company during the past year—\$103,886,000.

It topped the "century mark" for the first time in the company's history, as the federal treasury took the biggest single bite—a \$53,900,000 chunk.

So the company that supplies gas and electricity to about 3,000,000 customers in northern California paid nearly \$12,000 an hour for every hour in the year as its share of taxes.

THE Pacific Gas and Electric Company report also made this point:

For a number of years taxes have been by far the largest single item of expense in conducting our business. In 1954 they absorbed 25.3 per cent of our revenues from all sources.

Taxes, of course, must be recovered in our charges for utility service.

That's perfectly clear for all stockholders to see.

It means that more than \$1 out of every \$4 the company customers are billed for



Q "TALK is not cheap. It can't be. It is taxed too heavily. Last year Pacific Telephone & Telegraph Company paid \$109,000,000 of taxes for itself, and in addition collected another \$60,000,000 of excise taxes from its telephone users in behalf of the tax man. That makes a total of \$169,000,000 of taxes on talk, as levied through one western company in one year. Every telephone user paid some part of that load, and every word carried its levy. The user should hear that word."

PUBLIC UTILITIES FORTNIGHTLY

is simply to take care of the tax man. (That leaves just \$3 out of \$4 for the company to use for operating expenses, for interest and dividends, and for expansion purposes.)

IT means that the 3,000,000 company customers pay an "average" of \$33 a year just to satisfy the tax man.

It means that the company's total tax bill was more than double the \$51,000,000 paid by the company as wages and salaries for its operating employees in the year 1954.

But that, of course, is only part of the story.

The tax man got almost twice as much from Pacific Gas and Electric Company in 1954 as the company owners got in the form of net income. (That net income is subject to the control of regulatory authorities, but not so the tax item.)

And he got almost three times as much as the company's common stockholders received in dividends.

It is all there in the company report for stockholders to see.

The 3,000,000 customers of the company, however, are not so likely to realize just how much "tribute" they pay to that "silent partner"—the tax man.

3. WHEN Grandmother was a girl the iceman came about twice a week. He was paid for his ice, more often than not in cash, and his charge was for his commodity and his service.

There was very little direct tax burden on the iceman in those days. But the iceman has long since been succeeded by the kilowatt, that little unit of electric power.

The kilowatt, as everybody knows, is a tremendous worker. He makes the ice

right in the home—neatly, quickly, and inexpensively.

In addition to cooling and freezing, he also heats, cooks, beats, scrubs, vacuums, lights, keeps time, and runs radios and television sets.

He is very versatile. And he is very easy prey for the tax man.

So he also provides Uncle Sam with a great and growing volume of tax revenue.

CONSIDER, for a moment, the situation of Southern California Edison Company, the company whose statement was noted at the start of this report.

Southern California Edison Company supplied its 1,250,000 customers with 11 billion kilowatt-hours of little helpers. That is quite an army of workers.

The customers paid a total of \$155,000,000 for their services.

That sum included \$40,119,000 for the tax man, or nearly 26 per cent of the total amount paid. So the tax man received about \$1,000,000 more than did all the employees of the company combined.

Moreover, he received about one and a half times more than the company owners garnered in the form of net profits. And he got twice as much as the company owners got in dividends.

The busy kilowatt, then, is a tax target, the like of which would have made the iceman rebel.

And his employers, the users of company power, gave the tax man a profitable ride every time they turned on a light, every time they cleaned house, watched television, etc.

Granddaughter is paying for the goods and services, plus an additional 25 per cent or so for the tax man.

But does she know it?



All Utility Customers Soaked with Taxes

"THE tax man plays no favorites in the industry, generally. Power companies, gas companies, and phone companies throughout the nation labor under a similar heavy tax burden. And so do their consumers. Nobody will deny that good government costs good money—and each must pay his share. But too heavy a tax burden on talk, too big a tax load on the energetic little kilowatt, too heavy a levy on the heat unit of natural gas, can stifle the growth and development of the companies that provide these utilities. That is the basic danger—unless it is understood."

4. FOURTH of the California utility company reports is that of Pacific Lighting Corporation, which serves more than 2,000,000 customers in southern California through its two operating subsidiaries, Southern California Gas Company and Southern Counties Gas Company.

This makes Pacific Lighting, which dates from the gas-light era, the biggest gas man in the nation, by far. He no longer supplies gaslight, to be sure. But here is an indication of his present services:

Last year the company added more than 90,000 new meters to its system—for the eighth consecutive year. This year he is adding more.

Last year alone the following gas appli-

ances were sold to customers served by his system: 156,000 ranges, 261,000 water heaters, 195,000 heating units, 19,000 clothes dryers, 11,000 refrigerators.

That is just a sample. The system did a gross business of \$183,000,000 in the year, earned a net profit of about \$16,900,000, and paid its owners dividends aggregating about \$13,500,000.

Who got the biggest piece of change? The tax man took a total of \$30,093,000, even though the company's rate of return on its investment is carefully regulated.

HERE'S a hint of what that tax load meant: Each customer paid an "average" levy of nearly \$16 as a part of his

PUBLIC UTILITIES FORTNIGHTLY

gas bill. The corporation employed about 7,850 people, so the tax load figured about \$3,800 for each one—an amount equivalent to a pretty good wage.

The tax man was sitting right on everybody's shoulder, then.

Each time the customer fried an egg, or heated tea water, the tax collector was right there metering her. Every time she took a bath, did the dishes, or turned up the furnace, there he was—billing her.

He took at least \$1 out of every \$6 she paid in gas bills, in fact.

But did she know she was toting that considerable added burden?

THERE is little or nothing unique about the situation of these four California utility companies.

The tax man plays no favorites in the industry, generally. Power companies, gas companies, and phone companies throughout the nation labor under a similar heavy tax burden. And so do their consumers.

Nobody will deny that good govern-

ment costs good money—and each must pay his share.

But too heavy a tax burden on talk, too big a tax load on the energetic little kilowatt, too heavy a levy on the heat unit of natural gas, can stifle the growth and development of the companies that provide these utilities.

That is the basic danger—unless it is understood.

IT is all there for the stockholder to peruse. But it is also a matter of more than passing concern to the user or consumer, and to the public generally.

For the people are the ones who, in the final sense, pass judgment on matters of rate making and matters of good government, too.

The built-in utility tax burden, in short, is rightfully everybody's business.

All that is needed are the facts. If they prove shocking, or stagnating to the flow of capital, or stultifying to progress, it is everybody's business.

"IN the United States there is one telephone in service for each three people; elsewhere in the world the ratio is one telephone for each sixty-eight people. . . . This striking contrast between our country and its neighbors does not arise out of the circumstance that our citizens are more talkative than the Russians or the English or the French or any other country. Nor does it indicate that those people wouldn't like to have more telephones. We have more telephones in our country for the same reasons that we have more plumbing, more automobiles, more schools, and more freedom. We have all of these comforts and conveniences because God not only has blessed our nation with an abundance of material and spiritual resources, but since the first days of our nation's existence he has given us a leadership which has cultivated and nourished both types of resources. The founding fathers established for us a government which has permitted the utilization of those material and spiritual resources for a constantly improving standard of living for all of us."

—HARLAN W. HOLMWOOD,
Executive vice president, General Telephone
Company of California.



Government Regulation of Business: A Challenge to Lawyers

A philosophical review of the reasons behind public utility regulation from the very beginning, and the difficulty of maintaining a safe middle course between the extremes of overregulation and underregulation—both of which can be equally destructive.

By JOHN B. PRIZER*

Is government regulation of business a good thing or a bad thing? Many of us will at once be inclined to say it is a bad thing, of course — at best, the dead hand of bureaucracy restraining and defeating individual initiative and enterprise; at worst, the entering wedge of socialism and the destruction of the capitalistic system. While I am certainly not going to say that government regulation of business is necessarily and in all its forms a good thing, I would like to suggest that the objective which is so important to all of us—preservation

of our system of free, private enterprise in our businesses and professions and in our lives—can best be served, not by a blind condemnation of the existence of regulation, but rather by a continuing critical appraisal of the specific purposes which any given form of regulation may serve in any particular area; of the respects in which in actual practice it falls short of or defeats those purposes; and of the ways in which law and practice should be changed to remedy those shortcomings.

The lawyers among us have not merely an opportunity but a duty to be constantly vigilant in this respect. Sound, enlightened regulation, in those areas where experience has shown there is genuine pub-

*General counsel, The Pennsylvania Railroad Company, Philadelphia, Pennsylvania. For additional note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

lic need for it—regulation which meets that need and at the same time is sufficiently flexible and realistic to preserve the vitality of individual initiative—may well be the ultimate key to the preservation of our private enterprise system against pressures for governmental invasions into or operation of important areas of business activity. The public needs and demands which have brought about regulation have increased their pressures as our population densities have increased and our economic and social patterns have become more complex.

Total, unreasoning resistance to those pressures is, in the long run, more likely to bring about something worse than regulation—*viz.*, socialization—and thereby ultimately defeat our objective of preserving private enterprise. Like the arteries and veins in our bodies, regulation, while keeping firm enough to contain the blood stream of human initiative and prevent its destructive overflow, must yet be sufficiently flexible and nonconstrictive to permit the full and free flowing of this vital stream through the proper channels and into the organic centers where it is needed to maintain the very life of our economy and our society.

GOVERNMENT regulation of business in the United States is widespread, and it appears in many forms. An obvious example, and one which all of us encounter from time to time, is to be found in the antitrust laws, whose general purpose is the prevention of monopoly or monopolistic practices in order to preserve competition and the opportunities afforded by competition for the free play of initiative. Implementation of this purpose, in accordance with the standards established by

these antitrust and related laws, lies in large part with the courts, for execution in private or public antitrust proceedings. But implementation is also entrusted in part to a regulatory agency, the Federal Trade Commission, which has been vested with broad, regulatory jurisdiction over substantial areas of business activity, for the purpose of preserving competition within fair trade limits.

There are, of course, numerous other agencies which have broad jurisdiction in important areas of business activity and are not limited to a particular type of business, such as the Securities and Exchange Commission and the National Labor Relations Board. But the areas in which regulation has become most firmly established and far-reaching are the industries which have come to be regarded as being "clothed with a public interest," and which consist primarily of the public utilities, subject to such agencies as the Interstate Commerce Commission, the Federal Communications Commission, the Federal Power Commission, and the various state commissions. Most of the examples noted in this article have been drawn from this area because it is regulation's most fertile and active field. Parallel examples, however, can be found in almost any area of government regulation.

THESE public utility industries have come to be regarded as being clothed with a public interest because, by virtue either of a public grant of privileges or of special opportunities to take advantage of or abuse public trust (*e.g.*, an innkeeper or carrier entrusted with a traveler's goods and person, or a shipper's freight; telephone company or electric power company enjoying natural monopoly), some gov-

GOVERNMENT REGULATION OF BUSINESS: A CHALLENGE TO LAWYERS

ernmental control of private activity has proved to be essential. Early in the development of our common law, persons who were engaged in what were termed "common trades or callings," in which certain privileges and opportunities were inherent, came to be subject to duties and responsibilities which did not apply to others. Among these duties were the duty of care and the duty to serve. It was this duty to serve which crystallized into the concept of being affected with the public interest, and is today a generally distinguishing characteristic of the class of businesses known as public callings.

THERE is nothing new about government regulation of business—it is by no means an invention of the New Deal, as some may think, although the area of regulation was, of course, very much enlarged under the New Deal, and was then sometimes characterized in its administration by a philosophy which to some of us did not always seem consistent with private enterprise. But regulation, in a variety of forms and for various purposes, has existed at least since medieval times.

In the Middle Ages government took the responsibility for protecting consum-

ers through regulation of weights and measures and the quality of bread and beer; and at the same time the craft guilds protected the standards of artisans and regulated competition by controlling admission to the trade. Standards of living of producers as well as of consumers were also regulated at an early date, largely through control of prices, and legislation designed to prevent speculation and cornering of the market was counterpart of our modern antimonopoly legislation. Indeed, prior to the nineteenth century, government regulation of business was widespread. Under the mercantilist philosophy of the sixteenth and seventeenth centuries, individual initiative was greatly limited and it was thought that industries should be widely regulated in order to promote the interests of the state.

However, new political and social outlooks encouraged by the American and French revolutions, and the sudden industrial revolution which caused industry to demonstrate new vitality and initiative and to outgrow overnight existing forms of control, were responsible for the development of entirely new attitudes. Predominant among these attitudes was that expressed by the philosophy of *laissez*



Q "WHILE I am certainly not going to say that government regulation of business is necessarily and in all its forms a good thing, I would like to suggest that the objective which is so important to all of us—preservation of our system of free, private enterprise in our business and professions and in our lives—can best be served, not by a blind condemnation of the existence of regulation, but rather by a continuing critical appraisal of the specific purposes which any given form of regulation may serve in any particular area; of the respects in which in actual practice it falls short of or defeats those purposes; and of the ways . . . to remedy these shortcomings."

PUBLIC UTILITIES FORTNIGHTLY

faire. Belief in the beneficent results of free enterprise and in the perniciousness of governmental paternalism became the predominant and controlling philosophy, and it is that which we have inherited and are now determined to defend.

FREE enterprise ideas were applied to nearly all forms of business in the United States in the nineteenth century, and in the case of public utilities it was with great reluctance that government moved toward curtailment of the supposed benefits of unrestrained competitive enterprise. For example, in the early days of the railroads liberal charters and subsidies assisted their development, while few regulations were proposed to interfere with their freedom. Franchises were granted to two or more rail companies to furnish competing services in the same community, so that competition might be fostered and improved service provided. And the vigor with which this freedom of development was pressed forward played a major rôle in the opening up of our country and the growth and expansion of our economy.

But this unrestrained competition had some unfortunate consequences, especially in the case of the utilities, because of the nature of the services which they rendered and their monopoly position. For example, in the case of the railroads, at points where competition was intense, they frequently resorted to price cutting, with resultant serious losses, and then made up those losses by charging exorbitantly high rates where there was no competition. This abuse of monopoly position, brought about by lack of restraint where competition existed, became very acute in the 1870's, and led to the establishment of special state

commissions which were charged with the duty of fixing rates and given affirmative control over transportation facilities. But the power of these state commissions proved insufficient; and that fact, together with the further fact that transportation was becoming a national and not merely a local matter, led to the enactment in 1887 of the Interstate Commerce Act—the act which through successive enlargements and amendments has become the foundation of the present complex and far-reaching scheme of regulation governing a large part of the transportation industry.

THE experience of other utilities, such as electric power, telephone, water, and gas, was similar in many respects to that of the railroads. Initially, it was believed that competition was the life of the trade, but experience showed that uncontrolled competition in these natural monopolies could lead to wasteful and uneconomic duplication of plant and facilities in the competitive areas; and where no competition exists the monopoly position of the utility could lead to abuses of monopoly power at the expense of the public interest in adequate service. Destructive rate wars inevitably occurred in areas where public needs were not sufficient to support two or more competing utilities, and where there was no competition, service was often impaired. The result was the establishment in 1907 of a new type of state public service commission with broader regulatory powers, New York and Wisconsin being the pioneers. The New York and Wisconsin legislation established commissions with power to prescribe forms of books and records, to inquire into the management of the utility



Practical Regulation Required

“REGULATION in all its forms must be realistic. It must be geared to the needs of particular industries in the context of time and place. It must take into account the changing character of industrial and economic conditions and constantly readjust to new needs. Trial-and-error techniques are required, rather than blind adherence to principle. And, above all, each form of regulation, each proposed extension or relaxation of regulation, must be tested in the light of whether it will permit sufficiently free flow of the life stream of initiative while at the same time meeting the social pressures and public demands which give rise to regulation in that instance. Regulation need not and must not supplant competition.”

business, to prescribe rates, make orders with respect to the adequacy of service, and otherwise do what was thought necessary for effective protection of the public interest in reasonable rates and adequate service.

Subsequent events in the development of the regulation of transportation and other utilities have tightened still further the grip of government control and reduced the area of free initiative. And, of course, since the advent of the economic

catastrophe and political revolution of the late twenties-early thirties, the alphabet has been exhausted several times over in the attempt to find designations for the multitude of regulatory agencies which have fastened their hold on business generally.

AGainst this very brief and cursory sketch of the development of regulation, we find in the field of transportation regulation some of the dangers and de-

PUBLIC UTILITIES FORTNIGHTLY

structive results of underregulation, on the one hand, and overregulation, on the other—the Scylla and the Charybdis between which we must steer a middle course. The question may well be asked: How can there be such a thing as underregulation?—how can harm result from too little regulation? Let us look at the transportation industry. The developments which led to the growth of regulation indicate plainly that there must be some regulation in the transportation industry—the public would not stand for complete deregulation of the railroads or the motor common carriers, for example; and recent events have shown that, even in these much-regulated areas, there can still be destructive rate cutting which, if not controlled, could ultimately lead to bankruptcy and destroy private enterprise in those industries.

One of the causes of such destructive practices is the lack of regulation where there should be regulation. Almost the entire railroad industry is subject to very extensive regulation of its rates and fares, operating practices, and types of service. But only 20 per cent of the motor carrier industry, and only 10 per cent of the water carrier industry, are subject to such regulation. Private motor carriers, contract motor carriers, and motor carriers of agricultural and livestock products, for example—very substantial and important areas of transportation—are largely exempt.

WHEN motor common carriers (other than those hauling these exempt commodities) and the railroads increase their rates to meet increased labor costs forced upon them, or reduce their rates to meet the competition of each other or of their unregulated competitors, their rates

may be suspended by the Interstate Commerce Commission or by the state commissions, upon the protest of shippers or competitors, and the proposed changes prevented from becoming effective for many months, while lengthy and elaborate hearings, briefs, and arguments provide activity for a number of lawyers.

Meanwhile, in the case of proposed rate increases, the hiatus between revenues and increased costs, which the rate increases are designed to close, continues on and even widens, and much-needed revenues are lost forever. By contrast, the unregulated carrier can, without fear of any such suspension, increase his rates immediately to meet increased costs, thereby maintaining his financial strength, while that of his regulated competitor is being drained away by the delays of regulatory process. Meanwhile also, in the case of proposed rate reductions designed to meet competition, which have been suspended in the manner described, the business which the regulated carrier seeks continues to be lost to him, and to be enjoyed by his unregulated competitor, during the period of suspension; and when that suspension period is over and the regulated rate reductions are allowed to become effective, they can be met at once by the unregulated carrier without fear of suspension. If the regulated carrier wants to meet those new rates of his unregulated competitor, his rates are again subject to suspension, and the process starts all over again.

LET us look a little more closely at the overregulation side—again with examples from the transportation field. The pattern of regulation which rests so heavily on the railroads is replete with restraints which once served a public purpose

GOVERNMENT REGULATION OF BUSINESS: A CHALLENGE TO LAWYERS

in preventing abuses of monopoly power, but which are no longer needed for any such purpose and which today serve only to stifle individual enterprise. The competition with which railroads are confronted today at every turn — motor, water, air, regulated, and unregulated — has eliminated the railroads' monopoly position and therefore the need for regulatory safeguards against abuse of such position.

And yet, these restraints continue in the law. To cite examples: Under the provisions of the Interstate Commerce Act, the Interstate Commerce Commission may determine—and in the past often has determined—that, in its judgment, a proposed increase in rates, required to meet increased costs, will have the effect of diverting too much traffic from the railroads, and has therefore disallowed it, despite the judgment of management to the contrary. The commission also has power to determine—and often has in the past—that proposed reductions in rates to meet competition were lower than necessary to meet the competition, and has therefore disallowed them—although the practical result often is that the competition is not met and the traffic continues to be lost. This is certainly the assumption of managerial discretion by the regulatory agency. Proper exercise of the initiative essential to our

private enterprise system requires that basic pricing policies, including evaluation of the effect of prices on business, remain a managerial function.

THE power of the commission to suspend rate changes while months of hearings and arguments take place has already been referred to. During the period of rapidly spiraling inflation following World War II, rate increases to meet the successive increases in labor costs imposed upon the railroads by government action, were suspended by the commission for periods averaging from 200 to 380 days. The revenue lost by these delays due to the regulatory process approximated a billion dollars for the railroad industry. That revenue can, of course, never be regained.

None of the foregoing should be construed as criticism of the present Interstate Commerce Commission. There is good reason to believe that the present commission is aware of these and other inequities in the regulatory scheme of the existing Interstate Commerce Act, and, within the area entrusted to its discretion, would not be likely to be guilty of the type of destructive action referred to above. But administrative discretion cannot entirely, or even largely, cure inequities in the law, and so long as those inequities continue in the law, opportunity remains



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PUBLIC UTILITIES FORTNIGHTLY

for regulatory throttling of initiative which, in wrong administrative hands, could destroy private enterprise.

BEFORE leaving this citation of examples of overregulation, let us consider briefly another area of burdensome government action; *viz.*, state and local government action. Many regulated industries are subjected to both federal and state regulation. Practically all utilities have to face such a double front of regulation and suffer from a certain amount of cross fire between the two. But here again, particularly vivid examples are to be found in transportation, which is subject in many respects not only to dual forms of control but to overlapping controls and has also to contend with local points of view which are frequently inconsistent with and harmful to the national interest in maintenance of a sound system of interstate transportation adequate for the needs of interstate commerce and the national defense.

State action compelling continuance of uneconomical passenger train service and facilities, in the face of the fact that the passenger service of the nation's railroads is incurring an annual deficit of \$700,000,000, and is therefore being supported by other railroad services to the extent of that deficit; enforced contribution, beyond any value to the railroads, to the cost of grade-crossing elimination and grade-crossing protection, which are almost entirely for the benefit of the railroads' competitors and not for the railroads or their patrons; destructive state and local tax burdens, out of all proportion to ability to pay or to real economic value—these are but a few of the types of instances in which state and local regulatory and other government action can, and sometimes does, stifle private

enterprise and thwart the national interest in preservation of a sound and healthy interstate transportation system.

INCIDENTALLY, there are a number of interesting problems for lawyers in this field of relationship of conflicting federal and state interests in transportation. Of course, the power of Congress over interstate commerce is very broad, and generally thought to be complete, and it is clear under the Supreme Court's decisions that Congress may override state action in the regulation of such matters as rates and service where the result of the state action is to discriminate against or unduly burden interstate commerce. But how far can Congress go in prohibiting or restraining state taxation of such instrumentalities of interstate commerce as the railroads?

State taxing power is traditionally a "sacred cow" in the courts' decisions. Its preservation is to some extent essential for the very existence of the states as separate entities, and the principle of intergovernmental immunities, stated in *McCulloch v. Maryland* and fundamental in our constitutional law, seems to require that some limit be placed upon the power of Congress to interfere with state taxation. And yet the state of New Jersey is today levying on the railroads of New Jersey, \$1.60 in taxes for every dollar of revenue earned by those railroads within the state, thereby requiring that 60 cents be brought into the state, from revenues earned elsewhere, for each dollar earned within the state.

If this pattern of taxation were applied in every state of the Union, it would not be long before the railroads of the country would be bankrupt and either forced out of business or into government ownership. Is not the power of Congress over inter-

GOVERNMENT REGULATION OF BUSINESS: A CHALLENGE TO LAWYERS

state commerce sufficient at least to protect the national interest in preventing such a result, and therefore to prohibit state taxation which would bring about that result?

THESE few examples from the transportation field, of under- and over-regulation—of imbalance and inequity in regulatory laws and processes—are typical of the many instances in which regulation of business is on the verge of or is in fact operating against private enterprise. Continued progress—one might well say regress—along this path reveals disturbing vistas. If managerial incentive is held captive, if necessary price or rate increases are too little and too late, if labor is permitted to capture an overgrowing percentage of revenues at a time of rising costs and declining revenues, private enterprise cannot survive. With special interest groups—agriculture and labor, for example—pressing for special favors, with the public generally pressing for lower rates and improved service, the credit and financial condition of the overregulated industry, especially where competing with underregulated competitors, inevitably becomes impaired. Large-scale bankruptcies can result, and large segments of such industries find themselves in a position where private operation cannot be continued. Under such circumstances the step from government control to government ownership and operation is not only short but certain.

The experience of the French railways in the 1920's and 1930's is illustrative of what can happen to business under these circumstances. In 1930, their labor costs represented 59 per cent of total operating charges, and as this figure increased and a

40-hour week added 80,000 new employees to the payroll, a balancing of revenues and expenses became impossible, and nationalization was inevitable. Transportation and communication abroad are, as you know, for the most part in government hands, and we know from at least the British experience that nationalization of such an industry as the transportation industry leads rapidly to the nationalization of other industries such as coal and steel.

THE harmful effects of government ownership may be illustrated by the experience of the transportation industry in this country. Transportation, like any business, in government hands has always proved to be inefficient, uneconomical, and wasteful, and we have had a decisive demonstration of it in the contrast between the period in World War I when the United States government operated the railroads, and private operation in World War II. During the short period of twenty-six months of government operation in War I, a deficit of \$1.2 billion resulted, and during this period, of course, no taxes were being paid to the government and no return earned for the railroads' stockholders. But, in World War II, under private operation, the railroads not merely operated in the black, but in addition paid \$6 billion in taxes and \$1.1 billion to shareholders as dividends. Other disadvantages result from government operation. Personnel is selected for reasons other than competence and experience. Taxpayers are saddled with a mounting burden of deficits along with a contracting area of taxability—since government does not tax itself. Public debt increases enormously, and from that alone, the most serious dangers would confront our free enterprise sys-

PUBLIC UTILITIES FORTNIGHTLY

tem. Government operation would, finally, more than double the number of employees in the federal government and hence greatly increase the number of voters who could be persuaded through fear of loss or hope of reward to support the party in power.

HERE, then, are the extremes to be avoided—the Scylla of no regulation and the Charybdis of destructive regulation. The dangers of those extremes are clear. A demand for no regulation is obviously unrealistic, and ignores public needs and pressures which experience has shown must be recognized. Such a demand ignores also the fact that in important areas of industry, especially in the utility field, the complete absence of regulation might well again, as it has in the past, open the door to intraindustry practices which, under present-day conditions, could easily lead to self-destruction.

Regulation also serves to protect such businesses as utilities—which have always been a target for demagogues—from the pressures brought to bear upon them by special interest groups and by power-hungry individuals willing to capitalize upon the interest and strength of such groups. On the other hand, too much regulation—regulation of the throttling kind to which I have already referred—can bring about the displacement of managerial initiative and imagination by the dead hand of bu-

reaucracy, and can lead to the ultimate destruction of our private enterprise system.

How shall we chart the middle course between these hazardous extremes? There is certainly no simple, easy answer. Regulation in all its forms must be realistic. It must be geared to the needs of particular industries in the context of time and place. It must take into account the changing character of industrial and economic conditions and constantly readjust to new needs. Trial-and-error techniques are required, rather than blind adherence to principle. And, above all, each form of regulation, each proposed extension or relaxation of regulation, must be tested in the light of whether it will permit sufficiently free flow of the life stream of initiative while at the same time meeting the social pressures and public demands which give rise to regulation in that instance.

Regulation need not and must not supplant competition. Its objective should be the preservation of competition, with the interposition of limited controls which will keep that competition healthy and vigorous while meeting specific public purposes. It can be and must be a bulwark of defense against the destructive forces of unbridled and unhealthy competition, on the one hand, and against socialization and destruction of private enterprise, on the other.

“THE antidote to self-interest by businessmen is a responsibility to society, but I am sorry to say that all my brethren do not share it. I know many men in business who still don't know that the world does not revolve around them and their particular company.”

—CLARENCE B. RANDALL,
Chairman of the board, Inland
Steel Company.



Florida's Phenomenal Phone Progress

In Florida everything grows fast, from plants to population, but apparently the sunny climate of the Peninsula state has had a phenomenal effect on growing more telephone poles and telephone stations. While the telephone business is booming everywhere in the United States, as far as growth of stations and traffic are concerned, the actual facts and figures of what has happened in Florida seem almost incredible.

By C. E. WRIGHT*

A FEW months ago the one-millionth telephone in Florida was installed in the office of Governor LeRoy Collins by the telephone industry of the state amid appropriate ceremonies. It was a specially inscribed instrument commemorating the occasion, which marked a record in telephone service expansion in recent years that has had few parallels in the remarkable history of the telephone industry in the United States. Although Florida is sixteenth in population among

the 48 states, it is thirteenth in the number of telephones, of which it has more than any state in the Southeast and more than any state in the entire South excepting Texas.

Those participating in the ceremony in the governor's office included J. N. Johnson, president of the Florida Telephone Association and general manager of the Inter-County Telephone & Telegraph Company of Fort Myers, who made the presentation; Blair C. Stone, manager of the Southeastern Telephone Company, which serves Tallahassee, the state capital;

*Professional writer, resident in Jacksonville, Florida. For additional note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

Claude J. Yates of Jacksonville, general manager of the Southern Bell Telephone & Telegraph Company; Wilbur King, chairman of the Florida Railroad and Public Utilities Commission; Earl W. Brown, president of the Florida State Chamber of Commerce, and Carl D. Brorein, president of the Peninsular Telephone Company, Tampa, who was master of ceremonies at a luncheon which followed the presentation.

THE really remarkable thing about installation of the millionth Florida telephone is that about half of the telephone expansion in Florida has occurred within the past seven years, although the first big bulge started soon after the end of World War II. Since the war's end the telephone industry of Florida has expended more than \$350,000,000 to improve and expand service. A concomitance of Florida's rapid telephone growth, which has far exceeded population increases, is the variety and unique character of some of the regulatory questions the Florida Railroad and Public Utilities Commission has been called upon to solve. To set the background, some historical and statistical references are necessary.

Jacksonville got the first telephone exchange in Florida twenty-eight months after the world's first central office began functioning at New Haven, Connecticut, on January 28, 1878. The thirty-four original subscribers were easily listed in a one-page directory. At the beginning of this century there were only 6,285 telephones in all of Florida. Southern Bell had 1,884 and 17 independent companies had about 4,400.

It required sixty-eight years from the installation of the first telephone in Florida

for the Southern Bell and the 22 independent companies now operating to arrive at the 500,000 mark, although during most of that period Florida telephone expansion was far outstripping population gains and telephone growth in the United States as a whole. For example: In the 1940-50 decade California had a 53 per cent increase in population, largest of any state, and a percentage increase in telephones of 107. Florida, with a 46 per cent increase in population, had a 165 per cent increase in telephones. During that decade the rate of increase of telephone stations in Florida was 5.3 times that of the United States as a whole. Percentage-wise the biggest growth was in the three-decade period from January 1, 1920, when there were 62,936 telephone stations in the state, to June 30, 1950, when the number reached 632,587, an increase of 905 per cent. In the United States as a whole the increase during this same period was 190 per cent. The telephone gain in Florida since the end of the second World War has been just under 300 per cent.

THE greater Miami area provides a good illustration of what has been happening in a number of Florida areas. Its 275,000 telephones outnumber those in the New Orleans or Atlanta areas, although both of the latter have larger populations. From 1940 to 1954 the increase in population in the greater Miami area was 150 per cent, according to Southern Bell calculations, but the increase in the number of telephones was 307 per cent. To serve the Miami area alone, Southern Bell requires upward of 3,700 employees with an annual payroll of about \$12,500,000.

Miami Beach, with an estimated resi-

FLORIDA'S PHENOMENAL PHONE PROGRESS

dent population of around 50,000, has 70,000 telephones, probably the largest per capita rate in the world, but of course a considerable part is accounted for by the great number of hotels, motels, and apartment houses.

Fort Lauderdale, one of the fastest-growing cities in the United States in its population class, has grown from around 18,000 in 1940 to an estimated 57,000 or more in 1955. The Fort Lauderdale exchange of Southern Bell, which serves most of Broward county excepting Hollywood and Pompano Beach, has experienced a 928 per cent growth since 1940. Southern Bell demographers, projecting population gains in that area over the next two decades, predict that the increase in number of telephones in 1965 over 1940 will be 1,198 per cent, while the anticipated gain in 1975 over 1940 will be 4,950 per cent.

EVEN smaller communities in Florida have had spectacular gains. The Melbourne area, for example, has had a 186 per cent increase in population since 1940, but a 626 per cent gain in telephones, while Fort Pierce, with a 93 per cent population gain in the same period, had a 460 per cent telephone expansion.

While some of the smaller independent

companies in the state serving predominantly rural areas have not shown the striking gains of the urban areas, this has been partly due to the strong drift of new Florida residents to the cities, together with the high cost of installing transmission wires to isolated habitations. The Florida Telephone Company, one of the leading independents, with headquarters at Ocala, is now experimenting with radio-telephone where setting of poles and stringing of wires, plus right-of-way costs, would be prohibitive for the small number of prospective subscribers. Many parts of Florida are still sparsely settled despite the congestion that is occurring in some of the more populous areas.

Southern Bell serves about 40 per cent of the land area of Florida. The remaining 60 per cent is divided up among 22 independent companies, some of them with less than 2,000 subscribers. One, in fact, actually lost ground last year, its subscribers declining from 1,003 to 964, this being so much opposed to the general trend as to be worthy of note. Examples of growth among even some of the smaller companies serving communities where population growth has not been spectacular are: Quincy Telephone Company, Quincy, from 1,586 to 1,753 last year; St. Joseph Telephone & Telegraph Company,



QUOTE *"THE greater Miami area provides a good illustration of what has been happening in a number of Florida areas. Its 275,000 telephones outnumber those in the New Orleans or Atlanta areas, although both of the latter have larger populations. From 1940 to 1954 the increase in population in the greater Miami area was 150 per cent, according to Southern Bell calculations, but the increase in the number of telephones was 307 per cent. To serve the Miami area alone, Southern Bell requires upward of 3,700 employees . . ."*

PUBLIC UTILITIES FORTNIGHTLY

Port St. Joe, from 2,766 to 2,974; West Florida Telephone Company, Marianna, 1,295 to 1,422; Sante Fe Telephone Company, Melrose, from 344 to 538.

AMONG the 22 independents in Florida the largest and oldest is the Peninsular Telephone Company, which serves several counties of a fast-growing southwestern Florida, including such cities as Tampa, St. Petersburg, Clearwater, Lakeland, Bradenton and Sarasota, which has nearly a quarter of all the telephones in the state. At the end of last year it had 232,009 main stations, a gain of 21,639, or approximately 10 per cent in a year. Since 1945, however, when the number was only 84,250, the gain has been 570 per cent, well above the state average.

W. C. Brorein, an Ohioan, who established this company in 1901, was the earliest pioneer in the independent telephone field in Florida. He started his company in competition with Southern Bell, which at that time had only 400 subscribers in Tampa. Later it bought out Southern Bell's Tampa holdings and has gone on to become one of the outstanding independent telephone companies in the country. Upon the death of the founder in 1937, Carl D. Brorein, a nephew, succeeded to the presidency, a position he still holds.

Another pioneer in the independent field is the Florida Telephone Corporation of Ocala, now celebrating its thirtieth year. Max E. Wettstein, president and general manager, describes the company's growth from 1925 to 1945 as normal, from 5,200 subscribers in 1925 to 9,200 in 1945, or about 200 a year. Since 1945 an average of 2,200 subscribers a year have been added. At the end of last year it had 29,387, a gain of 218.5 per cent since the end

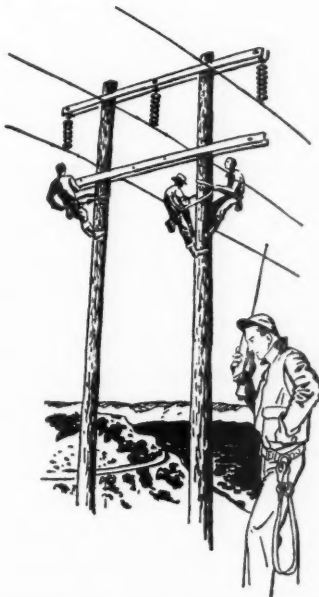
of World War II, leading Mr. Wettstein to remark that "we will soon be gaining in one year as many as we gained in the first twenty years." In fact, he predicts that by 1960 the territory served will require 56,000 telephones, or nearly double the number now on the books. And Mr. Wettstein asks: "Where but in central Florida could a company experience five times as much growth in the last nine years as it had in the entire twenty years preceding?" Of course this growth is typical of what has also been happening elsewhere in Florida.

ASIMILAR growth record has been achieved by the Inter-County Telephone & Telegraph Company of Fort Myers, which was organized by the late Barron G. Collier more than thirty years ago to serve a large area embracing several southwestern counties and a considerable part of the Everglades. At the end of last year, with an increase of 3,059 telephones during the year, the company had 21,500 subscribers. In four years between January 1, 1951, and January 1, 1955, its growth was equal to its entire growth in the previous twenty-eight years.

Three of the independent companies which serve parts of north Florida rural areas have their headquarters in Alabama or Georgia. These are the Florala Telephone Company of Florala, Alabama; the South Georgia Telephone Company of Sylvania, Georgia, and the Southland Telephone Company of Atmore, Alabama. A fourth company, the Southeastern Telephone Company, with headquarters at Tallahassee, serves a part of south Georgia. Even though the Tallahassee area is not growing in population as rapidly as some of the southern sections of the state,

Authorizing Phone Lines

“UNDER a law passed by the 1953 state legislature, before constructing or extending any telephone line or system, or purchasing an existing system, the company must obtain an appropriate certificate of necessity from the commission. An exception is the extension of lines within a municipality where a company is presently operating. In June, 1954, the commission adopted a set of rules and regulations covering every phase of telephone operation and service, even including the requirement that ‘telephone operators shall be courteous, considerate, and efficient in the handling of all telephone calls’ and that there shall be 24-hour service at all exchanges.”



a comparison of its Florida expansion as compared with that of Georgia throws an interesting side light on the Florida growth factor. Last year Southeastern gained 2,266 subscribers (from 20,458 to 22,724) or more than 11 per cent in Florida as against a Georgia gain of 421 subscribers (from 10,172 to 10,593) or a little more than 0.4 per cent.

Another singular fact is noted in this company's report to the Florida Railroad and Public Utilities Commission. Its Florida subscribers averaged 2,066 calls per telephone as against 1,893 calls for each Georgia subscriber.

THIS points up another interesting fact. A Southern Bell official comments that “The people in the South are the talkingest folks in the entire nation.” And

he backs this up with the statement that Southern Bell figures indicate that customers in the Southeast average more than seven calls a day for each telephone, which is “a higher calling rate than exists in any other area of the country.” In Florida people use telephones at least as frequently as in other parts of the South. Thus it cannot be said that “telephonitis” is a strictly southern custom as Florida has more Yankee population than any of its neighboring southern states.

Miami, for example, which is more of a northern than a southern city on an origin-of-population basis, had an average of 665,743 local calls a day in 1946; by 1954 this had jumped to 1,597,966 a day. Long-distance calls originating through that office had much more than doubled during the same period—from 6,995 a day

PUBLIC UTILITIES FORTNIGHTLY

in 1946 to 17,318 a day in 1954. Long-distance calls originating in all of Florida rose from 27,098,000 in 1953, to 29,285,000 in 1954. In all of Florida the 23 telephone companies handle in excess of 1.8 billion calls each year, about two and a half times the number handled in 1945, while calling volume for long-distance service has gone up since 1945 to the point where the telephone companies handle more than 40,000,000 long-distance calls annually.

ALTHOUGH Florida gains in telephones have been the most spectacular, the rise in the standard of living and per capita income throughout the South has produced somewhat similar results elsewhere. For example, in the nine southeastern states served by Southern Bell (Florida, Georgia, North Carolina, South Carolina, Kentucky, Tennessee, Alabama, Mississippi, and Louisiana), the proportion of families having telephones has risen from 20.8 per cent in 1940 to 45.2 per cent in 1950 and to 52.6 per cent in 1954. A projected trend gives an estimated 64 per cent of families with a telephone by 1965. In Southern Bell's Florida area 61.7 per cent of families already have telephones.

Keeping up with enormous demand for telephones in Florida has required a large capital outlay, much of it in recent years. At the end of World War II the telephone companies of Florida had invested approximately \$90,000,000, which has since been increased to \$350,000,000, requiring a net increase over the 9-year period of about \$30,000,000 each year, and they are now spending at the rate of \$65,000,000 annually to keep up with the growth of the state, or three-fourths as much as was invested in the entire telephone industry of the state at the end of the war.

During the past ten years of expansion the cost of installation per telephone, according to Southern Bell figures, has risen from \$248 in 1945 to \$675 as of now, yet telephone rates during this period have risen on an average of only 35 per cent. Put another way, the average worker in Florida had to work four hours ten years ago to pay his telephone bill, but today he needs to work only two hours, as incomes have outstripped telephone rate increases.

BESIDES providing greater service, the telephone companies have capitalized on innovations, such as local dial switching systems, development of fine gauge cables, reduction in over-all size of load coils, development of alpth cables to be used in place of lead sheath cables, and adoption of new and improved instrumentalities. The state is crisscrossed by coaxial cables. The first came in 1945, when a four coaxial tube route was installed between Atlanta and Jacksonville.

In 1947 a coaxial cable was installed between Miami and West Palm Beach and the following year the link between Jacksonville and West Palm Beach was completed. Since then extensions have been made to Tampa and Cuba. The Orlando-Tampa cable is unique in that it is one of few in the country in which an independent company (Peninsular) shares ownership with the Bell system.

Supplementing the coaxial cables, super high-frequency radio came to Florida in 1952 and now parallels the cable route between Jacksonville and West Palm Beach by way of Orlando. Between West Palm Beach and Miami a super coaxial cable, tripling the capacity of the earlier model, is in use instead of radio relay.

FLORIDA'S PHENOMENAL PHONE PROGRESS

There are now 12 television stations operating in Florida, all linked with national networks, and six of them are equipped to receive or send color programs.

IN 1947 Southern Bell installed the first urban mobile radiotelephone channel anywhere connecting cars and trucks to telephones. This initial installation of 30 units has now grown to 151, using two channels. Since then this type of service has been installed at Jacksonville, Tampa, Fort Lauderdale, Homestead, Orlando, and West Palm Beach and will be extended this year to Fort Pierce, thus enabling a driver with two channels on his set to travel from the Florida Keys to Melbourne, all within range of a mobile transmitter and receiver. Tampa and Orlando now nearly blanket the central portion of the state and, as additional areas receive mobile service, the state will be covered.

Florida is also an important point for maritime radiotelephone communications, primarily with the large commercial fishing fleets in the Atlantic ocean and the Gulf of Mexico.

Jacksonville and Florida generally are part of the nation-wide Bell system plan to provide long-distance dialing. A \$6,000,000 switching center at Jacksonville will be ready for service next December, through which most operators in Florida will be able to dial long-distance calls to many points in the United States.

Another innovation is being tried out just across the Florida border at Americus, Georgia, where the Bell solar battery, coupled with a transistor, is being used experimentally to test the sun's rays as a source of energy. Obviously the ultimate success of this device will be of enormous interest in the Sunshine state.

THE impact of Florida's telephone expansion has naturally been felt by the Florida Railroad and Public Utilities Commission, which is obliged to police all complaints and controversies with only two telephone engineers. The size of this job for a small staff is indicated by the fact that there are 186 telephone exchanges in the state, of which 74 are operated by Southern Bell and 112 by the 22 independent companies.

State regulation of the telephone industry has been in effect in Florida since 1915. Five years later, in 1920, there were 70 independent companies operating in the state. By 1947 the number had been reduced to 18 through consolidations. The early regulatory period was marked by chaos in telephone communication. Most of the complaints were about toll service. Toll charges varied so greatly that rates between towns differed according to the direction in which the calls were handled. Uniformity was eventually established by the commission and today there is little for the commission to do in regulating tele-



Q "WITH about 50,000 out-of-state families migrating to Florida each year and with a continuing expansion of business and industry, a new telephone is being installed in the state about one a minute of every working day. At this rate, Florida will reach the 2,000,000 mark within less than a decade. Whole new residential developments are still without telephone service."

PUBLIC UTILITIES FORTNIGHTLY

phone traffic except for rate hearings, although occasionally some odd territorial conflicts arise.

Such an incident occurred recently when a new motel opened in a small patch of Southern Bell territory in northwestern Florida, completely surrounded by independent territory. The motel owner's logical exchange point was Havana, but he wanted a hookup through Quincy, where telephone service is handled by the Quincy Telephone Company. He appealed to the commission, and the dispute was settled by placing the subscriber with the Quincy exchange through foreign exchange service.

The thinnest telephone territory in Florida is operated by the Molino Telephone Company, near Pensacola, which has just thirteen subscribers. A rate increase on a grouping basis was recently approved, but a citizens' committee protested, necessitating a survey by the commission's engineers.

UNDER a law passed by the 1953 state legislature, before constructing or extending any telephone line or system, or purchasing an existing system, the company must obtain an appropriate certificate of necessity from the commission. An exception is the extension of lines within a municipality where a company is presently operating. In June, 1954, the commission adopted a set of rules and regulations covering every phase of telephone operation and service, even including the requirement that "telephone operators shall be courteous, considerate, and efficient in the handling of all telephone calls" and that there shall be 24-hour service at all exchanges. In some small areas the

commission has permitted the use of unattended dial exchanges. In fact, these have become quite common in predominantly rural areas.

The Rural Electrification Administration has played an important rôle in the development of some of the smaller exchanges. Two of them, the Florala Telephone Company and the Southland Telephone Company, which reach into Florida from Alabama, were the first in the United States to receive REA loans.

WHERE does the Florida telephone industry go from here? With about 50,000 out-of-state families migrating to Florida each year and with a continuing expansion of business and industry, a new telephone is being installed in the state about one a minute of every working day. At this rate, Florida will reach the 2,000,000 mark within less than a decade. Whole new residential developments are still without telephone service. As of a recent date, the Florida Railroad and Public Utilities Commission had a total of just under 20,000 "held orders," which telephone companies are required to file if they cannot fill a telephone order within ten days.

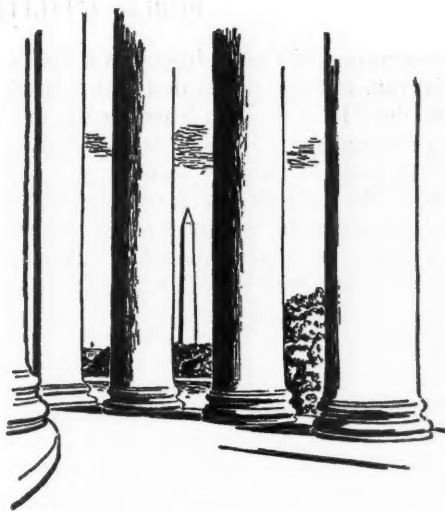
The Florida Planning and Zoning Association estimates Florida's 1960 population at 5,000,000, which would be a gain of more than 2,000,000 over the 1950 census total of just under 3,000,000. Fastest growing of any state east of the Rocky Mountains, being exceeded percentage-wise only by Nevada and Arizona, Florida might attain the top position long held by California for population growth. Thus the future for Florida telephone companies is one of the brightest in the country.

Washington and the Utilities

Hell's Canyon—a Campaign Issue

THE FPC's unanimous decision to license private development of the Snake river in Idaho seems certain to be a 1956 campaign issue. The commission's decision clears the way for Idaho Power Company to construct three dams on the Snake, a project which will preclude construction of a high federal dam advocated by the public power bloc. The National Hell's Canyon Association and its spokesmen in Congress, Senators Morse and Neuberger (both Democrats, Oregon), say that they will "fight by every means possible—politically and through the courts"—to prevent private development of the Snake.

Opponents of the private project had a month to seek FPC review of its decision. If this is denied, it is expected that some kind of an appeal from the decision will be made to the federal courts. Whether this voluntary association, as well as that of the other public power interveners, can prove enough direct interest in this FPC license to the Idaho Power Company to contest it on appeal is debatable. The private utilities in similar court tests of the



validity of Tennessee Valley Authority operations, federal loans and grants, Rural Electrification Administration super co-operative loans, etc., were always thrown out of court for lack of interest.

Furthermore, assuming that an appeal is taken to the U. S. circuit court of appeals for the District of Columbia, it is not clear on what grounds the appellants could justify a "stay" or other injunctive proceeding to restrain the Idaho Power Company from going ahead with the work under license. The reason for this uncertainty is the fact that the Hell's Canyon Association and other interveners could hardly show irreparable damage, or any damage at all, if the Idaho Power Company were to proceed with construction under a license subsequently found, on appeal, to be invalid or improperly issued. (The damage or injury in that event would be suffered by the power company.)

THE Idaho license does not improve the chances of congressional approval of bills still pending in Public Works committees of both chambers of Congress. These bills, to authorize federal

PUBLIC UTILITIES FORTNIGHTLY

construction of a single high dam at Hell's Canyon, were originally designed to head off the FPC's decision licensing the private company. Since they have failed to make progress in four sessions of Congress, the outlook for favorable action would hardly be improved if the private company had made substantial headway with its construction work before the next session of Congress could take up the measures again.

THE House bill authorizing construction of a high federal dam in Hell's Canyon failed to reach the House floor, despite hectic efforts of proponents to force the bill out of committee before adjournment. The idea was to make some kind of a showing of favorable congressional attitude so as to stall any FPC licensing of the rival low dam application by Idaho Power Company. Even so, proponents of a federal project are expected to make much of a hair-line vote in the Interior subcommittee authorizing the project. The vote was along strict party lines (14 to 13), with two Democrats, both opposed to the bill, absent when the vote was taken. Advocates of the federal project are now calling the subcommittee action "proof" that Congress will eventually act favorably on the high dam bill, and that the FPC should not now presume to license the private company.

Senatorial effort to influence FPC action took the form of a "demand" by Senator Morse that FPC Chairman Kuykendall disqualify himself on grounds of prejudice. Morse based his prejudice charge on the fact that Kuykendall served as chairman of the Washington state regulatory commission under appointment of Governor Langlie, "an outspoken opponent of a federal Hell's Canyon dam." Morse also claimed that Kuykendall's testimony on the Dixon-Yates contract

"proved beyond all doubt that he is biased . . . in favor of private utilities."

Gas Bill Deferred

THE outlook for Senate passage next year of natural gas legislation exempting producers from the general jurisdiction of the FPC seems fairly good at this time. But the legislative climate is still very much subject to change. After a hospital visit to ailing Senate Majority Leader Johnson (Democrat, Texas), Vice President Nixon announced that favorable action was confidently expected next session. Since membership in the Senate is less proportionate (than in the House) to large city population, sponsors of the legislation anticipate a greater victory margin than the razor-edged majority by which the bill squeaked through the House last month.

On the other hand, opposition from consumer interests, led by Mayor Clark of Philadelphia, is bound to become more vocal during the coming months. In addition to the possibility that it might change some prospective favorable votes, there is also the possibility that a hard core of about twenty "proconsumer" Senators, led by Senators Douglas (Democrat, Illinois), Kefauver (Democrat, Tennessee), Morse (Democrat, Oregon) Humphrey (Democrat, Minnesota), and others of like mind can be organized to use the threat of a filibuster to defeat action on the bill in the Senate next year.

As 1956 will be a presidential election year, and the gas bill is made to order for dramatic appeals by self-appointed champions of "public interest," the filibuster threat could scare the Senate leadership of both parties if it is aggressively used. Similar tactics by a southern bloc of Senators has blocked action for years on fair employment practices legislation.

WASHINGTON AND THE UTILITIES

FAILURE of the Senate to act this past session has left FPC in a difficult position. The commission finds itself under mandate from the U. S. Supreme Court to exercise a completely new, broad, and complex jurisdiction which one branch of Congress and a committee of the other branch now say it should *not* exercise, and for which it has little extra funds in any event. It is a frustrating situation for the FPC staff.

If the legislation in Congress does pass and become law early next session, there is reason to believe that more litigation is in store for producers. Some FPC jurisdiction over producers is provided for in the bill; namely, controls over contracts containing certain types of escalation clauses, plus other contracts where the figure set is in excess of "the reasonable market price," a regulatory innovation that can only become meaningful as it is defined by the commission and the courts. FPC may find that a little jurisdiction under the bill can mean quite a substantial amount in practice before the courts get through defining and interpreting it. On the other hand, producer forces were able to push the bill through the House largely in the form that it came out of committee. Two amendments were made, but both were readily acceptable to the bill's sponsors.

Hoover Group Wants Government out of Business

RECOMMENDATIONS made by the Task Force on Business Enterprises (outside of the Defense Department) were released last month. The Task Force report appeared about a month after the official demise of the Hoover Commission. In its report the group set forth a policy for government business enterprises. It states in part:

1. The free enterprise system is the best way to organize the economic resources of our nation.

2. Private industry is able to produce more effective results than government.

3. To the extent that the government engages in business enterprises, the base for taxation is reduced . . . Where government business enterprises can be supplanted by procurement from private industry the tax base is thereby increased.

4. Politically motivated decisions are desirable in their appropriate sphere; but political control of what are essentially economic activities does not produce the results for government business enterprises that competition and the profit motive produce for private industry.

5. Important activities that the government must perform are pre-eminently in the fields of foreign relations and national defense. The more business activities are handled by private industry the more government can concentrate on these pressing problems.

RECOMMENDATIONS stemming from this policy give further encouragement to private industry. Hope is held, at least, that the educational effects of the Task Force's recommendations will be lasting, and that some future Congress will take the necessary steps to put them into effect. They are:

1. The laws authorizing TVA to manufacture and sell fertilizers be repealed.

2. The Postal Savings System should be terminated and liquidated.

3. Parcel post rates should cover costs of service.

PUBLIC UTILITIES FORTNIGHTLY

4. Mailbags and locks should be manufactured by private industry.

5. The Alaska Railroad should be operated by a rail or engineering firm.

6. (In part) the electric generating and distributing systems of the Virgin Islands Corporation (a government corporation) be disposed of to the best advantage of the United States, or operated by a privately managed company.

7. National Park Service (Interior Department) should dissolve the National Park Concessions, Inc., and negotiate with concessioners to operate facilities for which there is a real public demand.

8. NPS and TVA should end concessions of Government Services, Inc. (a government corporation), and negotiate contracts with privately owned enterprises to operate needed facilities.

9. Government Services Administration should utilize private industry to perform service activities and functions for which it is responsible.

10. Government should make more use of private aerial mapping services where firms can meet reasonable government standards.

11. Prison Industries, Inc., should restrict its productions to levels providing adequate training for prisoners.

12. Federal tin smelter at Texas City should be closed and disposed of to best advantage of the U. S. government.

13. Nickel produced by Nicaro, Inc., should be sold to the stockpile at a price sufficient to recover all costs.

14. Abaca should be produced in low-cost areas and bring prices sufficient to recover all costs.

15. The Bureau of Mines (Interior) should terminate the production of helium and shale oil.

AEC "Yardstick" Atomic Plant?

SENTIMENT still exists in the congressional Joint Committee on Atomic Energy for federal construction and operation of atomic power plants. Latest manifestation of this was a bill introduced in the recent session (S 2725) by Senator Gore (Democrat, Tennessee) to authorize and direct AEC to construct six "nuclear power facilities for the production of electric power." This bill proposed that the six plants be built in different sections of the country and have different types of reactors so that the commercial and industrial potential of the atom could be demonstrated.

Earlier in the session Senator Gore joined with Senator Monroney (Democrat, Oklahoma) in introducing another bill (S 1049) to authorize AEC to produce atomic kilowatts on an experimental basis. No action has been taken by the Joint Committee on either proposal, but the proposals could become active next year if United States progress on commercial atomic development should become embroiled in the public *versus* private power issue which the Democratic leadership in Congress seems determined to agitate.

The AEC has given no reasons for turning down two proposals for construction of two atomic energy power-generating plants. The AEC merely stated that the proposals submitted by Consumers Public Power District (Nebraska), a public power agency, and Yankee Atomic Electric Company were not acceptable as bases for negotiation, as originally filed. Changes may be made so that further AEC negotiations may be resumed. However, AEC did approve negotiations with Detroit Edison Company and Commonwealth Edison Company, which include their respective associations.

Wire and Wireless Communication



Recommendations on REA Phone Program

RECOMMENDATIONS on REA's rural telephone program by a group of consultants were released by REA early last month. The recommendations grew out of a meeting in Washington, on July 21st, of representatives of REA, and officials of independent and Bell telephone companies and co-operatives. The consultants' statement follows:

1. Under the REA telephone loan program established by Congress in October, 1949, to help improve and extend telephone service, the REA has made long-term, low-interest loans to finance modern telephone service for more than half a million farm families and other rural subscribers. It is recognized that this is only a part of the tremendous progress made by the whole industry in modernizing and expanding rural service. Unquestionably, this progress permanently improves the economic status and social life of people in rural areas and is in the national interest.

It has been reassuring to see the steps taken to encourage co-operation between government and industry and also the progress made in solving various problems so as to provide compre-

hensive networks of telephone facilities.

The consultants urge that all components of the industry continue to work together in order to accomplish the great amount of improvement and expansion that is still needed to adequately serve farm families and other rural subscribers, and that the REA Administrator and his staff continue their program of implementing this policy of co-operation.

2. That REA take the leadership in sponsoring and scheduling accounting, management, public relations, and engineering seminars for REA telephone borrowers and all other interested parties, in co-operation with representatives of the telephone industry.

3. That a survey be made of REA borrowers and potential borrowers for the purpose of learning which aspects of the program are liked and which are disliked and the reasons therefor, for obtaining suggestions which would make loan requirements more nearly fit the needs and abilities of applicants, and for determining ways in which the program may be improved. Results of such a survey would be for the confidential use of the Administrator and his staff in determining policies and practices to be followed.

4. We commend the efforts of REA to encourage wider use of independent judgment by its engineers in assisting borrowers to promptly resolve engineering problems. We concur with the telephone engineering division's position that practices specified in the REA engineering manuals are guides and that flexibility is necessary in applying the standards to specific borrower situations.

Richland Phone System Disposal Stirs Debate

THE telephone industry will be watching with interest the results of a bill passed by both houses of Congress in the closing days of the session. The bill, sponsored by Senator Anderson (Democrat, New Mexico), authorizes the disposal of utility and other facilities in the "atomic cities" of Oak Ridge, Tennessee, and Richland, Washington. Read literally, the bill could conceivably lead to municipal operation of the Richland telephone system.

Specifically, the bill provides for the transfer of utility systems to either the city, the state, any political subdivision, or any person, firm, corporation, or other legal entity. In determining the transferee, the commission set up to dispose of the government's properties is directed to consider the pattern of ownership of comparable utilities in the state, the ability of the proposed transferee to operate the utility, the probable price of the utility and the ability of the transferee to pay it, and the desires of the voters of the community expressed directly.

The possibility that the law could be interpreted as authorizing a preference for giving utility properties to municipalities, instead of selling them to private operators, has caught the attention of tele-

phone industry representatives. Their fears were expressed in a letter to Senator Knowland (Republican, California) from Clyde S. Bailey, executive vice president of the United States Independent Telephone Association. Wrote Bailey:

This language (of the bill) is subject to interpretation that the Congress endorses municipal ownership and operation of communication systems used in providing service to the general public. For the first time, to our knowledge, it is apparently proposed to encourage, through this unprecedented action, municipal ownership in a field heretofore occupied throughout the nation by private enterprise. Municipal ownership of the telephone properties at Richland would be wholly inconsistent with the local, state, and national pattern of ownership and operation of such facilities. In all other atomic energy locations telephone service is provided by commercial companies.

BAILEY noted that Richland's communication facilities were provided and operated by the government with the specific understanding that at the end of the emergency the operation would revert to the commercial telephone company operating in the area; namely, the General Telephone Company of the Northwest. The company has indicated its willingness to take over the properties at a fair and reasonable value.

According to the Atomic Energy Committee, the reason AEC was authorized to give any utility to a city "is that it may be in the best interests of the United States, if all other factors are equal, to give the utility to the city and permit the city to use the operating revenues as increased sources of revenues for the city." The city of Richland has expressed its desire to have the phone system for itself in

WIRE AND WIRELESS COMMUNICATION

order to provide revenues to operate the city. The attorney general for the state of Washington has ruled that the city of Richland will not have legal authority to receive the telephone system under present state statutes. His opinion, however, has yet to be subjected to any firm legal test which might come as a result of the bill passed by Congress.

Other sections of the bill provide that charges and terms for the transfer of any utility may be established by advertising and competitive bids, or by negotiated sale. All utility properties are subject to transfer under these provisions, except property deemed needed by the disposing commission for its own use.

Utility Fined for Poor Service

THE Pennsylvania Public Utility Commission has imposed the largest penalty of its kind ever levied against a public utility in the state. The commission fined the York Telephone & Telegraph Company \$52,550 for failure of the company to furnish and maintain adequate service as ordered. The utility had been ordered in 1952 to eliminate deferred applications for new telephones and increase construction man power within a "reasonable" time.

Of the total fine, \$19,800 was for what the commission called the company's "persistent and unjustified" failure to provide telephones for 22 applicants who had asked for them during the years 1946-50. The fine was imposed at the rate of \$50 per day for each day that service was "unlawfully denied" during the year 1954. The commission said the applicants should have been served not later than the end of 1953, about fourteen months after the 1952 order to eliminate the backlog.

An additional fine of \$32,750 was imposed for noncompliance with the 1952 order to increase the number of cable crews from five to eight by November 13th of that year.

CWA Opposes Accounting Proposal

A PROPOSED change in FCC accounting rules to permit charitable and other corporate contributions to be charged as operating expenses is being opposed by various state regulatory commissions and the CIO Communications Workers of America. Replying to such adverse comments on its proposal, the American Telephone and Telegraph Company has reaffirmed its position that "if the accounts are to reflect the facts, there is no choice but to charge the operating expense accounts, as a part of the cost of running the business, with corporate contributions legally made by management." The proposed change would be made in FCC's accounting system for class A and B telephone companies. The CWA claims that a check of such Bell system contributions, admitted to be proportionately small and paid out of profits, amounted to "at least \$3,000,000" during the past year. Ignoring the Bell system's emphasis that the change would affect only corporate contributions (and not individual voluntary contributions by company officials), the CIO union charged that the proposed rule change was an attempt to shift the bill for charity contributions by company officials to the telephone subscribers.

The AT&T reply stresses that the proposed rule change "is an accounting procedure and not a rate proceeding." It pointed out that the proposal could have no effect on whether or not a particular expenditure by a telephone company were allowable as an expense deduction in a rate case.



Financial News and Comment

By OWEN ELY

Economics of General Electric's New Dual-cycle Boiling Reactor

GENERAL ELECTRIC COMPANY has prepared some interesting figures on capital investment and operating costs for its new atomic reactor as compared with a conventional fuel-burning plant. GE on May 14th announced the design of a new dual-cycle boiling reactor which was described as a "major advance toward the economic generation of electricity from atomic energy." In view of the current interest created by the Geneva convention, where a model of the GE reactor was exhibited, we are summarizing some of these data.

General Electric has been engaged by Commonwealth Edison and the Nuclear Power Group to construct the \$45,000,000 nuclear plant in Illinois referred to in this department in the July 21st issue (pages 111-113). This is one of the two proposed plants recently approved by the AEC.

GE estimates the installed cost of its dual-cycle reactor power plant at between \$200-\$270 per kilowatt of net output, including land costs. This would compare with about \$150 for a conventional steam plant. GE does not extend the comparison to hydro plants but the latter probably

cost about 50 per cent to 200 per cent more than thermal plants — costs vary greatly with the character of dam sites, etc. (See "Atomic Power versus Hydro Power," April 28th issue, pages 502-505.)

GE estimates operating and maintenance costs for its nuclear power plant at about \$5.60 per kilowatt per year compared with \$3.50 for a conventional station—the additional cost being due to the larger number of operators, the cost of maintaining security and health, etc. Fuel cost was assumed to lie between 1.5 mills and 2 mills per kilowatt-hour, while for a conventional plant the cost would work out around 3.15 mills for a net station heat rate of 9,000 BTU per kilowatt-hour and a fuel cost of 35 cents per million BTU. Fixed plant charges (taxes, depreciation, and insurance, plus return on investment) are assumed to be "comparable" for the two types of plants at about

DEPARTMENT INDEX

	Page
Economics of General Electric's New Dual-cycle Boiling Reactor ...	330
Charts—Atomic Power Progress ..	332, 334
No Rate Base Changes in Ohio and Pennsylvania	335
Public Power—Recent Developments ..	335
Table—Financial Data on Electric Utility Stocks	336, 337, 338

FINANCIAL NEWS AND COMMENT

14 per cent of investment. Apparently this does not make allowance for special insurance against "calamity risk," since GE considers the boiling water reactor inherently safe, for reasons set forth below. This safety factor also minimizes the amount of land needed to safeguard neighboring population, and thus reduces capital cost moderately. While operating and maintenance costs plus cost of capital are not detailed in kilowatt-hour cost, total kilowatt-hour cost is shown on a comparative basis in mills in the chart on page 332, from which the following figures can be approximated:

	<i>Minimum 30% Load Factor</i>	<i>Maximum 100% Load Factor</i>
Conventional Steam Plant	12.0	6.0
Nuclear Plant, Costing \$200 Per KW	14.6	5.7
Nuclear Plant, Costing \$270 Per KW	18.3	6.5

GE comments as follows: "At high-load factors, or as a base load plant, the higher-cost dual-cycle reactor plant is almost competitive with the steam power plant." Of course the cost of coal, oil, or gas in a given area is a competitive factor. (See Figure 5 on page 334.) General Public Utilities has announced that it plans to build an atomic reactor for its subsidiary, Manila Electric, since fuel costs are about twice as high in the Philippines as in this country.

It is customary to run all large new and efficient steam-generating plants as a "base load" at as near 100 per cent as possible—in other words, continuously except for necessary time out for repairs, breakdowns, or other emergencies. Since most of the atomic plants will be large, it can be assumed that they will also be run continuously, and hence if plant cost is held to \$200, the *initial* over-all cost would be

about the same as, or even a trifle lower than, for a similar thermal plant. But of course it will not always be operated on this basis. It is anticipated that atomic plants will become more efficient as the art develops, the same as the fossil-fuel plants. The older plants will gradually become obsolete and (particularly in a rapidly growing system) will be used at a decreasing load factor after the first seven or eight years, until at the age of thirty they would serve only as reserve capacity. With peak load doubling every ten years the new unit (either fuel or atomic) would have an estimated average load factor of about 43 per cent over the 30-year period. If the latter figure were used the cost of power at even the low-priced atomic plant would average slightly higher (about one mill) than at the conventional fuel-burning plant, according to the data here used.

GE points out that any nuclear plant must also qualify as follows, to compete successfully with fuel plants, and it thinks its new reactor will do so: (1) It must be able to pick up load rapidly. (2) It must be adaptable—able to drop part of the load and continue operation satisfactorily, or to start and stop frequently when necessary. (This is difficult in some types of reactors.) (3) There must be sufficient control range to overcome the build up of poisons in the reactor. (4) The reactor must be inherently safe within vicinity of operation so that it can be located in populous areas.

The first water-cooled reactors used hot water *under pressure* to remove heat from the nuclear fuel; but this so-called "cooling water" was pumped through a heat exchanger, where its heat was used to boil water in another system under lower pressure—the resulting steam being used to operate the turbine. However, the

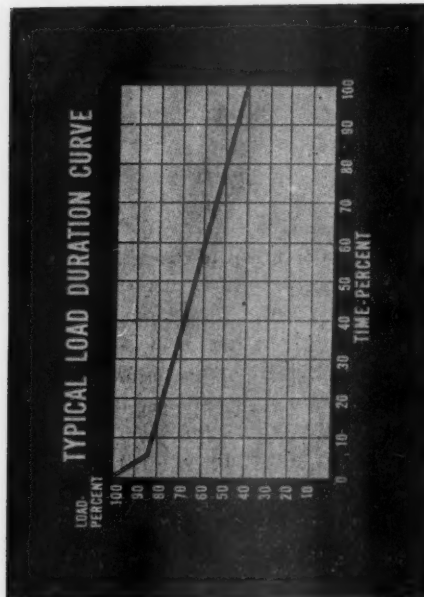


Figure 2

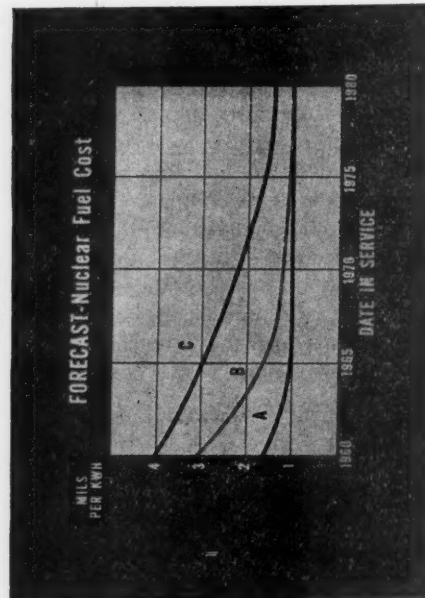


Figure 4

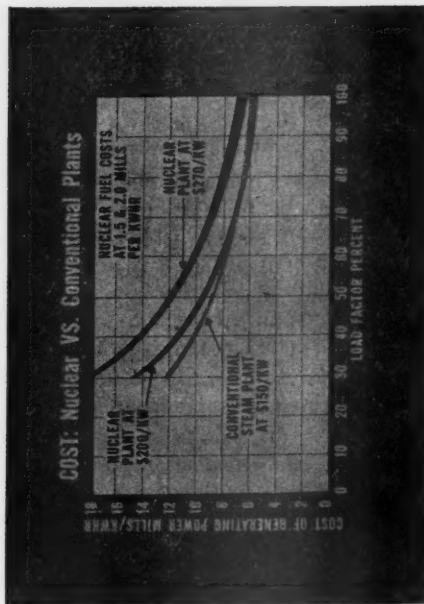


Figure 1

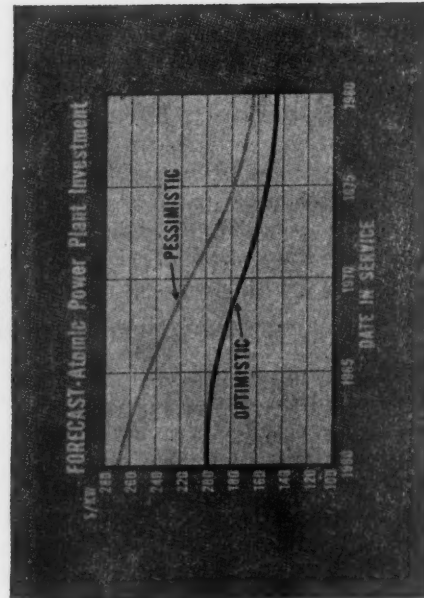


Figure 3

Source: General Electric Company

FINANCIAL NEWS AND COMMENT

high pressure necessary to prevent the "cooling" water from boiling required thick-walled pressure vessels and piping—a cumbersome and expensive arrangement. The loss of temperature in the heat exchanger, also, meant lower efficiency; the new design is estimated to be 16 per cent more efficient.

BECAUSE of the simpler design, GE Vice President McCune reports the new reactor will be able to produce several times as much power in a given size as its predecessor, the direct boiling reactor, thus reducing capital cost. Elimination of the heat exchanger, and generation of steam directly inside the reactor core, eliminates the need for high operating pressures and temperatures. The inherent safety of the direct boiling reactor has been retained in the new design; the chain reaction can only be sustained with water present, and if the reaction increases too much, temperature rises and the water in the reactor turns to steam, so that the reactor in effect quenches itself.

The direct boiling reactor was inefficient in that output tended to drop just when the power was needed most. By introducing a "flash tank" system which controls steam formation by feeding cooler water into the entrance of the reactor as load demands increase, the delicate balance of the chain reaction is maintained by GE so that more power is automatically delivered as the load increases. "Scientifically speaking—and from the practical side as well—the dual-cycle boiling reactor helps take industry past the pioneering stage in the development of practical peacetime use of the atom," Mr. McCune said.

FIGURE 3 shows GE's estimate of the progress that may be made over the next twenty-five years in reducing plant

and fuel costs in a nuclear plant. The company estimates gradual reductions of about 30-40 per cent in plant cost, and 40-65 per cent in fuel costs. Of course conventional fuel-burning plants will also continue to grow more efficient with changes of design, etc. Rising costs of oil and natural gas may be a competitive factor, although coal may be substituted for these fuels in some areas, assuming that its price remains steady as anticipated.

Figures 6 and 7 are estimates of the number of nuclear plants which may be added each year, and the resulting proportion of total generating capability as compared with thermal and hydro plants. GE thinks that by 1980 the proportion will be about as follows:

	Millions of KW Capability	Per Cent Of Total
Thermal	350	68
Hydro	44	9
Nuclear	120	23
Total	514	100%

SUMMARIZING, the cost situation with respect to the three kinds of power plants seems about as follows: In an efficient steam plant, cost of fuel per kilowatt-hour may vary from about one-half of over-all cost at 100 per cent load factor to about one-quarter of such cost on an average basis for all U. S. units, many of which are inefficient and operate at low load factor. (In foreign countries where fuel costs are high, the percentage would be higher, although greater capital costs might be an offsetting factor.) Hydro plants theoretically eliminate fuel cost, but capital cost is higher and it is usually necessary to produce or buy steam power during part of the year when stream flow is low, or droughts occur; hence there is actually some fuel cost involved, except for one or two companies such as Idaho Power or Niagara Mohawk which have dependable year-round hydro power.

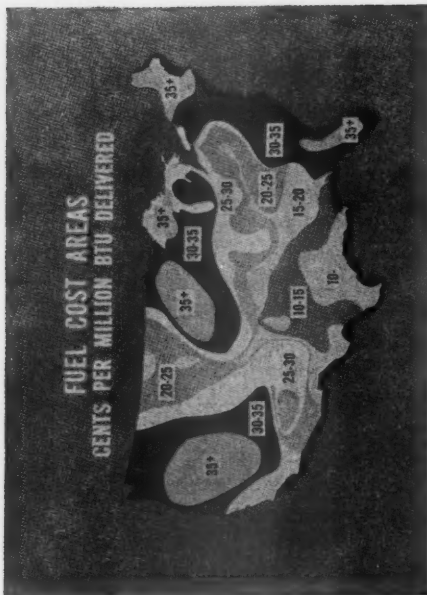


Figure 5

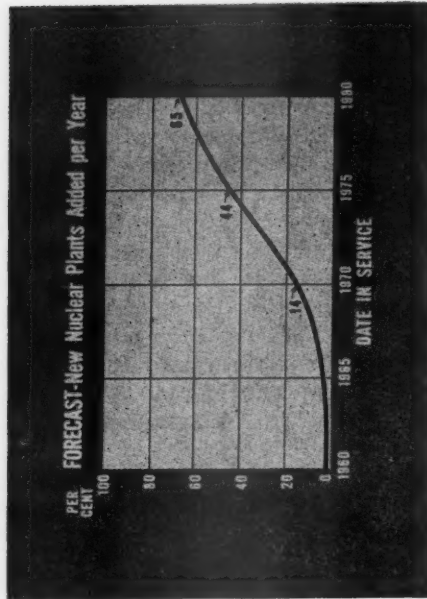


Figure 6

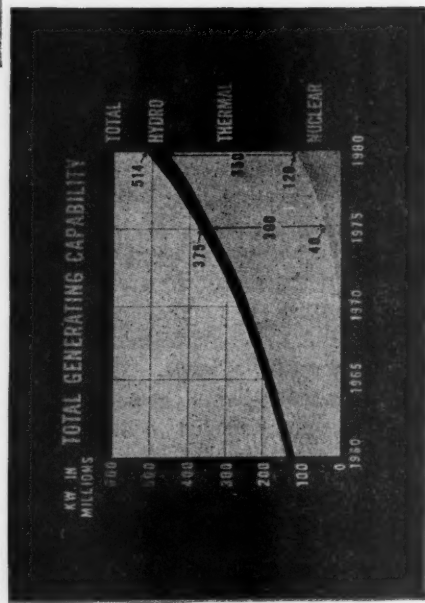


Figure 7

Source: General Electric Company

Atomic power reduces fuel cost nearly one-half, according to the GE estimate, but this cost may include a government subsidy. Fixed charges (return on investment, taxes, depreciation, and insurance) would be about 33-80 per cent higher; and operation and maintenance costs would run about 60 per cent higher than for a thermal plant. With 100 per cent load factor, fuel saving would apparently offset the higher operating and capital cost, although with lower load factors atomic power costs would run higher than thermal.

IF and when a controlled fusion process can be developed (based on the principle of the hydrogen bomb and the generation of heat in the sun), fuel costs would drop to a negligible figure and the risk factor should be reduced. This seems to be well in the future, though the talks at Geneva indicated that the U. S. and several other nations are actively working on the problem.

No Rate Base Changes in Ohio And Pennsylvania

THE General Code of Ohio authorizes the public utilities commission to ascertain for rate-making purposes the reproduction cost new, less observed depreciation, etc., of utility plant. From time to time efforts have been made to pass new legislation which would change the rate base to fair value or original cost, but these have proved unsuccessful thus far. Recent bills which proposed such a change died in committee when the legislature adjourned.

It is understood that efforts by Democratic forces in the state of Pennsylvania have also failed, for the time being at least, to effect a change in the fair value basis of utility regulation in that state.

Public Power—Recent Developments

Now that Congress has adjourned, a brief résumé of developments with respect to public power may be of interest. The big issue over "Dixon-Yates" is expected to die down—but with echoes in next year's political campaign—now that the city of Memphis has decided to build its own plant. The only issue now remaining seems to be over the penalty clauses involved in the cancellation of the contract with Middle South Utilities and Southern Company.

In the Hell's Canyon project private power (Idaho Power Company) has gained a round in the fight with public power. The FPC recently granted a license to the company to build three hydro dams costing \$176,000,000, in preference to the single high dam which would have cost the government an estimated \$357,000,000. Of course, the public power bloc may try to tag this as another "give-away" project, and substitute the issue for Dixon-Yates in next year's campaign. Congress, which had been working on a bill to authorize the federal dam, may also be heard from again.

At Niagara Falls, a stalemate continues over the congressional problem whether to assign the power project to the New York State Power Authority, headed by Bob Moses, or to a group of private utilities headed by Niagara Mohawk, which has been working on plans for the project for many years. This issue will also go over to 1956.

SOLID progress is being made in the Missouri river development program, which some years ago threatened to become another big power issue. Congress in 1944 adopted a development program (termed the Pick-Sloan plan) which is now about 50 per cent completed with

PUBLIC UTILITIES FORTNIGHTLY

the "closing" of the Gavins Point dam.

The Senate passed the Colorado river storage project some weeks ago, with a price tag of \$1,658,000,000. The bill provides for five power dams and 33 irrigation and storage schemes. "This mammoth spending plan," according to Raymond Moley in *Newsweek*, "will, if passed, probably cost ultimately between \$5 and \$7 billions," and may take seventy-five years to complete. According to Senator Douglas, who made a strong speech against the bill, power production costs would be about 4½ mills at Glen Canyon and 6 mills at Echo Park—the latter figure being nearly six times as much as the cost of producing power at TVA or on the Columbia river.

The corresponding House bill approved by a Reclamation subcommittee on June 14th called for only \$760,000,000. (Echo Park dam was omitted, but further study by an impartial board was suggested.)

KINSEY M. ROBINSON, president of Washington Water Power Company, in a recent talk before the EEI con-

vention, described the situation in the Pacific Northwest. He pointed out that the federal government still holds a large proportion of the land in the Northwest, while "the strong hand of government holds the strings of some 50 per cent of electric power generation." Federal funds already spent or scheduled for power development include the following:

	Millions
Grand Coulee	\$556 (with \$184,000,000 yet to come)
McNary	287
The Dalles	348
Hungry Horse	102
Chief Joseph	186
Albeni Falls	31

While three major private utilities which five years ago "seemed doomed for public power"—Pacific Power & Light, Washington Water Power, and Puget Sound Power & Light—are now stronger than ever before, the private utilities are not yet out of the woods. The demand for power is terrific, and the problem is to keep up with this demand, despite the fact that the PUD's and other public bodies enjoy the important preference clause in the Bonneville Act.



DATA ON ELECTRIC UTILITY STOCKS

1954 Rev. (Mill.)		8/9/55 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease 12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay-out	Common Stock Equity	
\$230	S Amer. Gas & Elec.	47	\$1.80	3.8%	\$2.79**	18%	June	16.8	65%	33%
35	O Arizona Pub. Serv.	25	1.00	4.0	1.48	1	June	16.9	68	28
9	O Arkansas Mo. Power	25	1.24a	5.0	1.65	15	June	15.2	75	30
27	S Atlantic City Elec.	44	1.60b	3.6	2.21	14	June	19.9	72	30
107	S Baltimore G. & E.	35	1.60	4.6	1.98	29	Mar.	17.7	81	37
5	O Bangor Hydro-Elec.	34	1.80	5.3	2.18	D2	June	15.6	83	33
4	O Black Hills P. & L.	28	1.28	4.6	2.15	4	Apr.	13.0	60	26
86	S Boston Edison	59	2.80	4.7	3.12	5	Dec.	18.9	90	53
17	A Calif. Elec. Power	15	.70	4.7	.76	D6	Mar.	19.7	92	34
17	O Calif. Oregon Power	33	1.60	4.8	1.97	23	May	16.8	81	36
7	O Calif.-Pacific Util.	30	1.40	4.7	2.21**	5	June	13.6	63	30
54	S Carolina P. & L.	25	1.10	4.4	1.58	14	June	15.8	70	32
23	S Cent. Hudson G. & E.	17	.76	4.5	1.02	20	June	16.7	75	33
16	O Cent. Ill. E. & G.	27	1.20	4.4	1.80	36	Mar.	15.0	59	32
30	S Cent. Ill. Light	53	2.20	4.2	3.04	6	June	17.4	72	40
46	S Cent. Ill. P. S.	29	1.40	4.8	2.23	38	June	13.0	63	33
10	O Cent. Louisiana Elec.	30	1.40	4.7	1.72	17	June	17.4	81	30
30	O Cent. Maine Power	26	1.40	5.4	2.04	14	June	12.7	69	30
105	S Cent. & South West	35	1.32	3.8	1.96	17	June	17.9	67	33
10	O Cent. Vt. P. S.	18	.92	5.1	1.29	29	June	14.0	71	30
95	S Cincinnati G. & E.	28	1.20	4.3	1.78	13	Mar.	15.7	67	37
6	O Citizens Utils.	16	.48h	6.0h	1.07	5	Mar.	15.0	45	38

FINANCIAL NEWS AND COMMENT

1954 Rev. (Mill.)	(Continued)	8/9/55 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay-out	Common Stock Equity
91	S Cleve. El. Illum.	36	1.60	4.4	1.99	D3	Mar.	18.1	65	44
3	O Colo. Cent. Power	27	1.20	4.4	1.63	15	Mar.	16.6	74	39
35	S Columbus & S. O. E.	33	1.60	4.8	2.15	15	June	15.3	74	33
310	S Commonwealth Edison ...	44	2.00	4.5	2.72	14	June	16.2	74	49
10	A Community Pub. Serv.	27	1.00#	3.7	1.76	13	Mar.	15.3	57	49
2	O Concord Electric	40	2.40	6.0	2.64	6	Dec.	15.2	91	63
60	O Connecticut L. & P.	19	.98	5.2	1.14	5	June	16.7	86	38
19	O Connecticut Power	45	2.25	5.0	2.56	10	Mar.	17.6	88	41
474	S Consol. Edison	51	2.40	4.7	3.07	7	June	16.6	78	43
170	S Consumers Power	50	2.20	4.4	3.25	8	June	15.4	68	42
61	S Dayton P. & L.	43	2.00	4.7	3.01	1	Mar.	14.3	66	36
31	S Delaware P. & L.	37	1.50	4.1	2.16	8	June	17.1	69	35
196	S Detroit Edison	37	1.60	4.3	2.28	16	June	16.2	70	45
113	A Duke Power	54	2.00	3.7	3.21	1	Mar.	16.8	62	53
81	S Duquesne Light	36	1.80	5.0	2.17	1	June	16.6	83	35
27	O Eastern Util. Assoc.	37	2.20	5.9	2.38	9	May	15.5	92	33
2	O Edison Sault Elec.	15	.80	5.3	1.13	25	May	13.3	71	49
10	O El Paso Elec.	43	1.60	3.7	2.37	9	June	18.1	68	37
10	S Empire Dist. Elec.	28	1.40	5.0	1.88	D11	Mar.	14.9	74	32
4	O Fitchburg G. & E.	54	3.00	5.6	3.26	16	Dec.	16.6	92	53
38	S Florida Power Corp.	42	1.60	3.8	2.07	10	June	20.3	77	30
79	S Florida P. & L.	37	1.00	2.7	1.83	32	June	20.2	55	35
163	S General Pub. Util.	38	1.70	4.5	2.51	11	Mar.	15.1	68	39
6	O Green Mt. Power	31	1.80	5.8	2.28	23	June	13.6	79	39
47	S Gulf States Util.	36	1.40	3.9	2.01	8	June	17.9	70	30
20	A Hartford E. L.	60	2.75	4.6	3.86	16	June	15.5	71	47
5	O Haverhill Elec.	43	2.15†	5.0	1.95	D35	Dec.	22.1	110	100
58	S Houston L. & P.	41	1.20	2.9	2.27	21	June	18.1	53	40
7	O Housatonic P. S.	26	1.40	5.4	1.58	20	Dec.	16.5	89	46
23	S Idaho Power	32	1.10	3.4	1.80	5	June	17.8	61	35
70	S Illinois Power	53	2.20	4.2	3.27	30	June	16.2	67	35
37	S Indianapolis P. & L.	28	1.20	4.3	1.81	13	June	15.5	66	35
18	S Interstate Power	15	.70	4.7	1.00	8	June	15.0	70	30
27	O Iowa Elec. L. & P.	27	1.25	4.6	1.92	15	June	14.1	65	30
31	S Iowa-Ill. G. & E.	35	1.80	5.2	2.34	15	June	15.0	77	39
31	S Iowa Power & Lt.	30	1.40	4.7	1.89	3	June	15.9	74	30
27	O Iowa Pub. Service	16	.80	5.0	.93	—	June	17.2	86	29
12	O Iowa Southern Util.	23	1.20	5.2	1.57	10	June	14.6	76	38
51	S Kansas City P. & L.	43	1.80	4.2	2.15	12	June	20.0	84	34
25	S Kansas G. & E.	28	1.20	4.3	1.97	11	June	14.2	61	31
36	S Kansas Pr. & Lt.	23	1.20	5.2	1.56	13	Mar.	14.7	77	26
35	O Kentucky Util.	29	1.28	4.4	2.16	26	June	13.4	59	33
6	O Lake Superior D. P.	23	1.10	4.8	1.45	3	June	15.9	76	37
5	O Lawrence Elec.	28	1.60	5.7	1.40	D25	Dec.	20.0	77	63
77	S Long Island Ltg.	22	1.00	4.5	1.28	14	June	17.2	78	32
41	S Louisville G. & E.	55	2.00	3.6	3.67	15	June	15.0	54	34
7	O Lowell Elec. Lt.	59	3.30†	5.6	3.04	D19	Dec.	19.4	109	65
8	O Lynn G. & E.	30	1.60	5.3	2.01	D7	Dec.	14.9	80	75
7	O Madison G. & E.	43	1.60	3.7	3.20	2	Dec.	13.4	50	53
3	A Maine Pub. Service	20	1.08	5.4	1.54	33	June	13.0	70	35
4	O Michigan G. & E.	41	1.35h	6.3h	3.42	17	Mar.	12.0	39	31
144	S Middle South Util.	32	1.50	4.7	2.23	15	June	14.3	67	35
24	S Minnesota P. & L.	27	1.20	4.4	1.80	D1	June	15.0	67	35
2	O Miss. Valley P. S.	28	1.40g	5.0	2.50	15	June	11.2	56	30
10	A Missouri Pub. Ser.	13	.60	4.6	.81	D10	May	16.0	74	28
5	O Missouri Util.	30	1.36	4.5	1.84	14	June	16.3	73	35
31	S Montana Power	40	1.60	4.0	2.75	5	June	14.5	58	36
122	S New England Elec.	17	.90	5.3	1.23**	—	Mar.	13.8	73	34
38	O New England G. & E.	18	1.00	5.6	1.32**	D1	June	13.6	76	37
43	O New Orleans P. S.	46	2.25	4.9	2.71	7	June	17.0	83	39
2	O Newport Electric	44	2.00	4.5	2.57	D3	June	17.1	78	34
73	S N. Y. State El. & Gas	42	2.00	4.8	2.76	3	June	15.2	72	35
210	S Niagara Mohawk Pr.	35	1.60	4.6	2.18	7	June	16.1	73	34
68	O Northern Ind. P. S.	38	1.60	4.2	2.65	20	June	14.3	60	34
118	S Northern Sts. Power	17	.80	4.7	1.13	10	June	15.0	71	33
9	O Northwestern P. S.	18	.90	5.0	1.34	10	June	13.4	67	27

PUBLIC UTILITIES FORTNIGHTLY

1954 Rev. (Mill.)	(Continued)	8/9/55 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay-out	Common Stock Equity
110	S Ohio Edison	51	2.20	4.3	3.30	13	June	15.5	67	41
40	S Oklahoma G. & E.	38	1.60	4.2	2.17	36	June	17.5	74	30
14	O Otter Tail Power	30	1.60	5.3	2.02	6	June	14.9	79	31
386	S Pacific G. & E.	52	2.20	4.2	3.10	15	Mar.	16.8	71	39
40	O Pacific P. & L.	27	1.30	4.8	1.58	D3	May	17.1	82	28
109	S Penn Power & Lt.	49	2.40	4.9	3.04	10	June	16.1	79	29
196	S Phila. Elec.	42	1.80	4.3	2.26	4	June	18.6	80	36
29	O Portland Gen. Elec.	26	1.10	4.2	1.56	20	Apr.	16.7	71	42
52	S Potomac Elec. Power	23	1.00	4.3	1.14	7	June	20.2	88	36
63	S Pub. Serv. of Colo.	45	1.80	4.0	2.37	11	June	19.0	76	34
250	S Pub. Serv. El. & Gas	32	1.60	5.0	2.19	27	June	14.6	73	31
62	S Pub. Serv. of Indiana	42	2.00	4.8	2.43	4	June	17.3	82	34
23	O Public Serv. of N. H.	18	.90	5.0	1.37**	37	June	13.1	66	33
10	O Public Serv. of N. M.	15	.68	4.5	.95	37	June	15.8	72	31
21	S Puget Sound P. & L.	38	1.72	4.5	2.19	15	June	17.4	79	58
49	S Rochester G. & E.	47	2.24	4.8	3.22	2	June	14.6	70	34
14	O Rockland L. & P.	21	.60	2.9	.83	36	Dec.	25.3	72	29
7	S St. Joseph L. & P.	25	1.32	5.3	1.77	2	Mar.	14.1	75	43
39	S San Diego G. & E.	19	.80	4.2	1.02	D3	June	18.6	78	44
8	O Sierra Pacific Pr.	46	2.00	4.3	2.85	30	May	16.1	70	28
154	S So. Calif. Edison	53	2.40	4.5	3.10	22	June	17.1	77	37
34	S So. Carolina E. & G.	19	.90	4.7	1.29	15	May	14.7	70	28
6	O Southern Colo. Power	16	.70	4.4	1.25	2	May	12.8	56	41
194	S Southern Company.....	20	.90	4.5	1.35	9	June	14.8	67	29
14	S So. Indiana G. & E.	33	1.50	4.5	2.38	18	June	13.9	63	34
4	O So. Nevada Power	18	.80	4.4	1.48	45	Dec.	12.2	54	64
1	O Southern Utah Pr.	15	1.00	6.7	.94	8	June	16.0	106	39
3	O Southwestern E. S.	22	1.08	4.9	1.65	9	May	13.3	61	31
33	S Southwestern P. S.	29	1.32	4.6	1.58	10	May	18.4	84	30
20	A Tampa Elec.	28	1.00	3.6	1.51	23	May	18.5	66	36
117	S Texas Utilities	75	2.32	3.1	4.04	19	June	18.6	57	37
35	S Toledo Edison	17	.70	4.1	1.04	20	June	16.3	67	29
11	O Tucson G. E. L. & P.	28	1.04	3.7	1.76	25	Mar.	15.9	59	40
114	S Union Elec. of Mo.	30	1.40	4.7	1.69	19	Mar.	17.8	83	36
28	O United Illuminating	53	2.55†	4.8	3.13	8	Dec.	16.9	81	51
4	O Upper Peninsula Pr.	26	1.40	5.4	2.38	60	Dec.	10.9	59	31
32	S Utah Power & Lt.	49	2.20	4.5	3.18	28	June	15.4	69	41
96	S Virginia E. & P.	40	1.60	4.0	2.44	22	June	16.4	66	32
23	S Wash. Water Power	41	1.70	4.1	1.99	8	June	20.6	85	35
116	S West Penn Elec.	28	1.30	4.6	1.94	9	May	14.4	68	27
64	O West Penn Power	51	2.40	4.7	3.05	13	Mar.	16.7	79	33
10	O Western Lt. & Tel.	33	1.60	4.8	2.51	32	June	13.1	64	27
22	O Western Mass. Cos.	43	2.20	5.1	2.98	8	Apr.	14.4	74	51
88	S Wisc. El. Pr. (Cons.)	34	1.50	4.4	2.15	12	Mar.	15.8	63	40
35	O Wisconsin P. & L.	26	1.28	4.9	1.76	—	Mar.	14.8	73	34
31	S Wisconsin Pub. Serv.	23	1.10	4.8	1.62	13	June	14.2	68	34
Averages				4.6%				15.9	72%	

Foreign Companies

186	S American & Foreign Pr. ..	13	\$.75(e)	5.8%	\$1.91	D16%	Mar.	6.8	39%	48%
137	A Brazilian Trac. L. & P.	8	—	—	1.26	D6	Dec.	6.3	—	70
56	A British Columbia Pr.	35	1.00	2.9	1.62	16	Dec.	21.6	62	28
16	A Gatineau Power	32	1.20	3.8	1.99	12	Dec.	16.1	60	30
10	A Quebec Power	33	1.20	3.6	1.56	20	Dec.	21.2	77	44
45	A Shawinigan Water & Pr. ..	71	1.45	2.0	2.84	25	Dec.	25.0	51	35

B—Boston Exchange. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. **Based on average number of shares. a—Also 8 per cent stock dividend. b—Also 5 per cent stock dividend. c—Also 3/10 share of Northern Illinois Gas for each share of Commonwealth Edison. e—Includes 15 cents extra. g—Also 10 per cent stock dividend January 31, 1955. h—Also regular annual 3 per cent stock dividend, which is included in the yield. †Estimated. #—Also occasional stock dividends.



What Others Think

Aids in the Selection of Electric Utility Bonds

BONDS of the electric utility industry are generally both sound and available and present a potential field of investment for bank funds. This is the conclusion drawn by the committee on investments of the savings and mortgage division of the American Bankers Association from analytical material which it will publish in the form of a booklet, entitled "Aids in the Selection of Electric Utility Bonds," to be released this month.

The booklet is being prepared to give the salient investment features of the electric utility industry. Its purpose is to provide material which will prove helpful to bankers who have the responsibility of the investment portfolios in their banks, but who also have other duties which take a large part of their time.

In presenting the material, James B. Stovell, vice president of the Dry Dock Savings Bank, New York city, representing the ABA Committee on Investments, and James W. Wooster, Jr., investment consultant to the committee, who were responsible for the preparation of material, made acknowledgement for statistics and subject matter to the Edison Electric Institute, the Federal Power Commission, Moody's Investor Service, Standard & Poor's Corporation, Institutional Utility Service, Inc., and also to bankers and in-

vestment analysts who made suggestions and assisted in the work.

THERE are probably more dollars invested in the electric utility industry than in any other single type of corporate enterprise, according to the booklet. It says:

Geographically, its plant and distribution lines penetrate practically every square mile of populated U. S. territory. In demand, its products have become so much a part of the American way of life that it is perhaps not too extreme to say that to the recognized necessities of life we have added electricity.

Despite the importance of these quantitative factors, however, it is only in conjunction with certain qualitative measures that the industry becomes such an outstanding one for the investor. These are:

1. Uniqueness of product.
2. Noncompetitive operation.
3. Record of, and prospects for, growth.
4. Demonstrated ability to withstand extreme fluctuation in the business cycle.
5. Uniform accounting.

PUBLIC UTILITIES FORTNIGHTLY

The lack of competition between electric utility companies is even more marked than the relative uniqueness of their product. Throughout the country, these companies operate under franchise, providing, for the most part, exclusive markets in given geographical areas. The economic wastefulness of competition in an industry requiring such a broad investment in local plant (transmission lines, conduits, meters, etc.) is of course obvious. It is true that in certain areas, municipalities with electric power and light systems, and the federal government do compete with a private company in the same area.

THE benefits of freedom from general competition, however, this booklet points out, are offset by the fact that in almost every state the industry is subject to state regulation and control. In cases where the company's business is interstate or involves the use of water from navigable waterways, and in certain other instances, the company is also subject to regulation by the Federal Power Commission. Occasionally, in addition, a political subdivision may also regulate the local utility company's policies.

According to analysis in the booklet, in the postwar years since 1945, sales of electrical energy have consistently set new annual highs, with 1954's sales being more than double those of 1945. Over the longer period, the record is equally impressive. Since 1926 and including 1954, the line of growth has been continually upward with three exceptions. The exceptions were 1929-32, a decline of 15.4 per cent; 1937-38, a drop of 5.7 per cent; and 1944-46, the war-peace conversion period, a drop of 3.7 per cent. Energy sales in 1954 were over seven times those of 1926.

SEPTEMBER 1, 1955

The ABA-prepared statement continues:

Important factors in the economy indicate continued expansion in the use of electrical energy and in the major classes of users. The trend toward more and more automatic industrial production is increasing the demand for electrically motivated and controlled machines. Other important factors are air conditioning—which has a large potential application to residential, commercial, and industrial establishments—and lighting.

Television, another important user of electricity, is still not available in many sections of the country.

A development for the future is the heat pump, which is expected to come into use in a rather substantial way, beginning in four or five years. This device is an all-year-round apparatus for space heating in the winter and space cooling in the summer. Depending upon the acceptance of the heat pump, it is possible that kilowatt-hour consumption, which now averages around 2,400 kilowatt-hours per customer, may rise to 6,000 kilowatt-hours per customer or more by 1968, or a threefold expansion in the domestic service of utilities.

BESIDES the section on "fundamental factors" from which the above quotes were taken, the booklet covers "accounting data," including both income accounts and balance sheet accounts; "operating factors," including generation, generating capacity, energy sales, revenues, and operating and financial data; and a special section on the "sources of statistical material," including the names, addresses, and costs of service, and publications covering the electric utility bond field.

All of the material in the text leads to the "analysis sheet," which provides a

WHAT OTHERS THINK

means for gathering together and recording in one place the important characteristics of the bonds of individual companies in accordance with the methods discussed in the various sections of the booklet. The study and comparison of the figures as between companies and the industry as a whole provide the banker with information on which to judge the quality of specific bonds under consideration.

In addition to Mr. Stovell and Mr. Wooster, members of the committee on investments include: Brison C. Tucker, vice president, Eutaw Savings Bank of Baltimore, Baltimore, Maryland, chairman; Carl G. Freese, president and treasurer, Connecticut Savings Bank of New

Haven, New Haven, Connecticut; Jarvis S. Hicks, Jr., vice president, Long Island City Savings Bank, Long Island City, New York; William E. Thomas, vice president and treasurer, Provident Institution for Savings in Jersey City, Jersey City, New Jersey; Joseph R. Jones, vice president, Security-First National Bank of Los Angeles, Los Angeles, California, president of the savings and mortgage division; Earle A. Welch, treasurer, Meredith Village Savings Bank, Meredith, New Hampshire, division vice president; J. R. Dunkerley, deputy manager in charge of the division, New York, New York; and Thomas L. Nims, secretary of the division, New York, New York.

Reaction to FPC Decision on Hell's Canyon

EDITORIAL comment on the Federal Power Commission decision to grant a 50-year license to Idaho Power Company for its three low dams in the Hell's Canyon reach of the Snake river in Idaho and Oregon has been surprisingly scarce. By and large, the furor generated deliberately by public power advocates, who were hardly stunned by the event, did not carry over into editorial reaction to the FPC-issued opinion and order. This was mild, though there was the expected variety of opinion in a cross section of the press. The prevailing calm seemed to belie the prediction, published prior to the decision by *The Oregonian*, that to make its ruling, FPC would need either the wisdom of Solomon or a bombproof shelter. After the decision, made August 4th, *The Oregonian* itself found that the ruling could hardly be regarded as controversial, in view of the circumstances under which it was issued.

The newspaper said:

The advocates of a single, high fed-

eral dam in Hell's Canyon lost their long fight in Congress, not in the Federal Power Commission. The FPC's unanimous approval of a license to Idaho Power Company for three dams in that reach of the Middle Snake river became a certainty when federal Hell's Canyon bills, for the fourth time, failed to get out of committees in either house.

The result of the FPC decision will be the addition within seven years, and much of it earlier, of 783,400 kilowatts of installed capacity to Idaho Power's service area in Idaho and eastern Oregon. Thus, at a cost estimated to be around \$160,000,000, the Idaho utility will be able to maintain its position of independence of the federal Columbia river system. In addition, the 1,000,000 acre-feet of storage at the largest of the three dams, Brownlee, will provide some flood control and incremental power at federal dams on the Columbia and (when built) on the lower Snake.

PUBLIC UTILITIES FORTNIGHTLY

The Oregonian summed up the congressional situation as follows:

Legislation to authorize a high federal dam in Hell's Canyon was introduced in the 81st, 82d, 83d, and 84th Congresses—and in the first two it had the advocacy of the Democratic President and Department of Interior. The bills died in committee in the first three Congresses mentioned. In the 84th Congress, sponsors put on the heat both in Senate and House to get at least a favorable committee vote before recess. Subcommittees in both houses did report favorably, by thin margins, but the main committees did not take up the controversy. The bills still are alive, but it is unlikely that the same Congress, in its second session, will attempt to overrule the Federal Power Commission.

Since Congress did not authorize a high dam at the last session—and the appropriation process is slow—it was certain that a federal dam could not have been completed in time to relieve a power shortage which will hit the region about 1960 if nothing is done to prevent it.

And certainly, though the federal bills set aside most of the at-site power for the state of Idaho, such a dam could not have been built in time to meet Idaho Power Company's expected power supply crisis in the winter of 1957-58.

THE NEW YORK TIMES, on the other hand, took a hostile view of the FPC ruling, saying the commission thus "rejected the proposal for one high federal multipurpose dam that would insure the production of more power and would be, in the words of the commission's own examiner, 'the more nearly ideal development of the Middle Snake.'" The news-

paper found it difficult to reconcile the words of President Eisenhower urging that water resource problems be attacked "intelligently on a broad base" with the administration's approval of a method of developing "this publicly owned natural resource in a way that might actually prevent realization of its full potential. The proposed piecemeal development of the river under private auspices might permanently prevent the full and integrated utilization of its resources for maximum public benefit. Not only the Northwest, but the entire nation, could be a loser," stated the *Times*.

The Scripps-Howard *Washington Daily News* remarked that the development would once again fire up the so-called public power issue. "Zealots who think nobody ever should build a dam except the federal government already are in full cry." The *News* felt that the FPC action would pinpoint the issue which would reverberate through next year's presidential election. "It is unlikely it ever will be conclusively settled," the newspaper expostulated, "but now is a good time to argue about it, out loud, so the people will have a chance to hear the pros and cons in 1955, and to express themselves at the next election." The *News* considered power development a legitimate issue which should come up for a good airing. But it hoped, "wistfully perhaps," that the debate could be hinged on facts and common sense, "not on mere obsession."

THE *Minneapolis Star* underlined the lack of enlightened debate with a selection of word blasts from the public power advocates. It repeated the comment of Senator Humphrey (Democrat, Minnesota), who termed the FPC action "just another example of the fact that this administration waits until Congress is away to uncork its special interests packages." Also that of Senator Morse

WHAT OTHERS THINK

(Democrat, Oregon), who said, "When this battle is over the people's interests will prevail." And that of Senator Magnuson (Democrat, Washington): "This ruling is a complete sellout of God-given resources to the private power body." The newspaper remarked that there were similar statements from the usual people.

Then it detailed its own views as follows:

For many years the public power crowd has tried by constant repetition of old refrains to put over the idea that they alone are on the side of the angels, that "the people" are entitled to the cheaper power which federal ownership can bring, and that private utility firms are heartless seekers of huge profits.

First of all, the utility companies aren't closely held corporations operating for the profit of a few wealthy persons. Their stockholders in the aggregate number millions of individuals. Insurance companies, pension funds, and educational institutions own substantial holdings in utility firms. Such investments have the highest approval because the companies are well run, subject to much regulation.

Important to government at every level is the fact that private utilities pay taxes. And the people who get dividends from the utility companies pay taxes on their earnings. Public power projects do not pay taxes, though occasionally there is a token payment to some branch of government. Furthermore, taxpayers the nation over must subsidize a large share of the cost of most federal power installations.

Under such circumstances the public plant should be able to sell power at lower cost. But to whose benefit?

A Task Force of the second Hoover Commission found that only about 10 per cent of the people would benefit di-

rectly from all the existing and proposed federal power projects in the country.

SCRIPPS-HOWARD syndicate writer Jack Steele claimed in his column that the administration planned to back the Hell's Canyon decision "to the hilt," and that it would back it up with some "impressive" figures. He summed up the main arguments of the Secretary of the Interior and other administration spokesmen as follows:

Federal development of Hell's Canyon would cost the government at least \$500,000,000—and possibly two or three times that much.

All this money initially would have to be appropriated from the Treasury—meaning it would have to be raised by taxes.

While most of it would be repaid to the Treasury over a 50-year span, this means only that money put up by today's taxpayers would be returned to their grandchildren.

All the nation's taxpayers would share this added burden, although the direct benefits would go only to four northwestern states.

The government has poured \$1.5 billion into power projects in the Northwest in the last ten years and already is obligated to spend that much more in the next decade. This is some 40 per cent of all federal expenditures for power resources.

Congress won't stand for much more of this. It has already turned down the Hell's Canyon project four times. Public power forces couldn't even muster enough votes to get it out of the House and Senate Interior committees this year.

By contrast, the Idaho Power Company will spend only \$250,000,000 on

PUBLIC UTILITIES FORTNIGHTLY

the project, including three smaller dams and transmission lines. Not a penny of this will come from the government. And the company will pay nearly \$10,000,000 a year in taxes on the project.

These arguments do not satisfy public power advocates who have branded the FPC decision as a "giveaway."

BUT, as *The Washington Daily News* editorialist was quick to insist, "partnership" policy does not mean, as public power advocates argue, that the President favors getting the government out of the power business entirely. "He is against what he calls the 'whole hog' theory, which is, as he said in Seattle in the 1952 campaign, 'that the federal government must do everything for us and to us'." In the opinion of the *News*, the President's policy is that the federal government should only do those things the people, the states, the regions, or private enterprise, cannot do properly for themselves.

The newspaper continued:

In the Hell's Canyon case, the FPC decided that private enterprise could do the job more feasibly and economically than the government, and without cost to the taxpayers of the whole country.

If private enterprise can do a job more cheaply, why should the whole nation of taxpayers be compelled to pay for it? Government monopoly, in the power field as elsewhere, is just as dangerous as any other kind of monopoly. It could be more so.

The public power issue has been boiling a long time. But now we have a President who doesn't believe nothing can be done unless Uncle Sugar does it—usually at a cost much higher than it could be done otherwise. He is opposed to empire builders in the government as well as private monopoly.

So this is a good time to give this issue a real airing. And we hope, wistfully perhaps, that the debate can be hinged on facts and common sense, not on mere obsession. After all, it is a dollar-and-cents question for all taxpayers—meaning everybody.

THE NEW YORK TIMES contended that the FPC decision merely indicated that the battle over Hell's Canyon had entered a new phase. The fight was not over, it said, since the commission could reverse itself, or its decision be overturned by court or congressional action. *The Oregonian* agreed that the fight was not over, but felt it could do nothing to change the outcome. It said:

As everyone knows, Hell's Canyon has been made a *cause célèbre* by the New Deal wing of the Democratic party. Attacks will continue at least until after the next election. It may be observed, however, that Federal Power commissions appointed by Democratic Presidents, ruled, in similar cases, for private utilities and against the Department of Interior in the Roanoke Rapids and Kings river projects.

It may also be observed that the public power-Democratic coalition has concentrated its fire on the Hell's Canyon issue while virtually disregarding issuing by FPC of temporary permits for the Northwest Power Company, an organization of four private utilities, to construct Pleasant Valley and Mountain Sheep dams in the Snake just below Hell's Canyon.

Despite what further delays may be smoked up by the Hell's Canyon high dam advocates, *The Oregonian* concludes, it is reasonable to believe at this point that the Middle Snake river will be developed by private interests from above the mouth

WHAT OTHERS THINK

of the Salmon river into Idaho. That is the way the wind blows. It is a factor which the U. S. Army Corps of Engineers must take into consideration in its

new job of revising the famed "308" report for comprehensive, multiple-purpose development of the Columbia basin. (See, also, page 354.)

Union *versus* Company Publications

A FIGHTER who goes into the ring against a two-fisted opponent with one arm tied behind his back is asking for a licking. Fred C. Foy and Robert Harper, authors of an article appearing in the May-June issue of the *Harvard Business Review*, entitled "Round One: Union *versus* Company Publications," put forward their belief that management has been a one-fisted fighter when it joins battle with unions for employee support. Their view is amply bolstered by research data. Management, they say, has already lost the first round by failing to seek employee respect for the American economic system as it has developed under private enterprise, and by foregoing discussion of controversial issues.

Is there a battle—a real difference in viewpoint—in the economic system conceived as desirable by employers, as contrasted with that sought by the unions? The authors think the two conceptions are "vastly different." They say:

The economic system of the *unions* is built around a desire for government regulation and protection; for high taxes on high incomes and on business, and high exemptions and low taxes on low incomes; for guaranteed jobs and wages; for an increasing employer responsibility for worker income, welfare, and retirement, regardless of costs.

The economic system of *employers* has at its core the conviction that increasing government controls and interference can hurt both industry and workers; that lower taxes in the top

brackets and a broader base for carrying the costs of running America will lead to the greatest prosperity for all; that there is no way in which either jobs, wages, or benefits can be guaranteed if sales are not made and profits are not earned.

BOTH sides have arguments and use economists and technicians to prepare their evidence. Both sides try to place their views before key people. But, say the writers of the article, only the unions seem to be doing an effective job of it:

(1) Only the unions are vigorously and effectively driving home to their members their arguments and their point of view. Week after week they pour out a flood of carefully planned and well-written articles which—irrespective of geographic area or union identity—advocate more government participation in the economy and reflect a solid front on almost every major policy question. This conclusion is based on a careful study of such union publications as *The CIO News*, *AFL News Reporter*, *The American Federationist*, *The Machinist*, *United Rubber Worker*, and *District Fifty News*, circulated to millions of union members.

(2) In contrast, the management publications regularly reaching the same union members fail—with only a few exceptions—to present any point of view about what management feels is good for America. Usually well

PUBLIC UTILITIES FORTNIGHTLY

written and often beautifully printed, they cover mainly employee social news, company sport activities, and brief news reports about the company. For the most part they are conspicuously silent on such basic subjects as the profit system or on key current issues before the legislatures. This conclusion is based on an intensive study of some 700 company magazines published for employee consumption.

THE authors analyzed both union- and management-written material, comparing subject matter, frequency of publication, presentation, audience, and apparent results, over a 5-month period from May 1 to September 30, 1954. The four topics receiving most attention in union publications during this period were: unemployment, taxes, public power, and the Eisenhower administration.

On the subject of unemployment, the authors counted 43 major articles:

Without exception, these articles demonstrated that union publications are used as media to advance a "progressive" program of national social legislation. Fear of unemployment was used to stimulate members to fight for union-sponsored legislative programs.

Legislation advocated by unions to relieve the unemployment situation includes:

1. Increased income tax exemptions.
2. Increased unemployment compensation benefits and duration.
3. Increased minimum wages.
4. Heavy government construction of homes, hospitals, schools, highways, and other public works.
5. Positive action under the Full Employment Act of 1946 to increase mass purchasing power and employment.

Unemployment statistics from the De-

partments of Labor and Commerce were printed regularly, the authors stated. Optimistic administration comment was contradicted in forceful language. The editors frequently lifted a sentence from context to emphasize a point. Headlines were effective in attracting the reader's eye.

THE subject of TVA and public power came up 17 different times in news stories and editorials, the authors noted. They state:

As in practically all the material published in union media, this subject was consistently interpreted from the union point of view. The editors, in presenting the material, made full use of accepted journalistic practices to gain their readers' attention.

Emphasis in these stories was placed on the Eisenhower administration's alleged catering to "big" business. Attention was particularly focused on President Eisenhower's directive authorizing a private utility to supply power through the TVA for the atomic energy plant at Paducah, Kentucky. Such criticism was accentuated by statements of the union's case for increased government intervention in the power industry—the major reason, according to union leaders, being to "obtain a low-rate yardstick that will force the present power monopoly to meet fair competition."

Many of the articles criticized the government's efforts to make a thorough and comprehensive study of public power *versus* private power, the underlying theme being that the Hoover Commission Task Force members were "not sympathetic toward and lacked understanding of public power." At the same time, union research directors presented easy-to-understand sta-

WHAT OTHERS THINK

tistics comparing the high cost of private electric power in areas where public power is not a factor in competition. The implication always was that public power development should be increased. . . . The point, here as elsewhere, is not that a union publication was necessarily wrong in what it chose to say, but that it only presented the one side of the picture which it wanted workers to see.

OF all the material appearing in union publications relating to union goals and political activity, the subject of taxes was handled most consistently, the authors state. Legislation to increase individual income tax exemptions was supported very actively, and GOP leaders were criticized for allegedly giving big business preferential tax relief. Existing tax legislation giving oil and gas producers depletion allowances of 27½ per cent of gross income was another favorite topic.

On the Eisenhower administration and the 83rd Congress, the writers found union news stories and editorials ranging in to almost every conceivable field to create indignation among the readership toward the viewpoint of management and the party in office. The theme that the Eisenhower administration was interested only in "big" business and neglected the welfare of the people pervaded all of them, they found.

Analysis of union publications led the writers to evaluate such activities as follows:

The union leaders' program is carefully planned and consistent. It deals almost exclusively with "breadbasket subjects"; union leaders do not talk in economic abstractions.

Communication with rank-and-file members is aided by excellent publica-

tions, which are used to promote social goals. From 45 per cent to 65 per cent of the space in some of these publications is allotted for this type of material.

Repetitious handling of the same subjects is extremely well done and indicates that editors and staff assistants are top-quality journalists.

Many of the union publications follow the same pattern of presentation with little or no deviation in the type of material.

IT may be that management has some good reasons for not answering the union challenge, but the authors suggest that it can find no excuse in saying that complete and factual information is not available to do the job required. It is available, and at the finger tips, as supplied by reputable management-sponsored organizations such as the National Association of Manufacturers, the Chamber of Commerce of the United States, the National Industrial Conference Board, and others.

The criticism of the authors is this:

Management just isn't using the material available to it. Officials of the organizations just mentioned informed us that they are having great difficulty inducing management to pick up the ammunition they provide. Even where material is filtered down through all the levels of supervision, it has not had any real impact on the thinking of employees, which is where management's story must be told if it is to dispel the oft-repeated misrepresentations of labor leaders.

In reviewing company publications addressed to employees, we found that:

Management did not counteract union activity among employees on realistic "breadbasket" subjects such

PUBLIC UTILITIES FORTNIGHTLY

as union leaders use as levers to promote national social legislation.

Employee publications frequently take a negative approach to challenging problems—more often resorting to “sniper tactics” against the opposition than to clear, logical statements of management’s case. Management often seemed to be “maintaining its dignity” when the audience it wished to reach understood “toe-to-toe” slugging better.

Controversial subjects were avoided, but at the same time attempts were consistently made to stimulate pride in the virtues of the “American way of life.” A steady reading diet of such “flag-waving” stories may prove an insult to the average worker’s intelligence, for he too believes in the American way of life. The futility of communicating in this manner has been noted several times in leading business publications.

Management has the same kind of self-interest that union leaders have, but when it has used its private communications media in an attempt to influence national, state, and local domestic legislation, it has done the job so awkwardly that its employees have often been left asking “why” to a lot of questions which should have been squarely faced in public statements.

ON the positive side of the ledger, Messrs. Foy and Harper observed some constructive action by management, most often taken during a particularly trying labor-management negotiation—usually in the form of letters to employees explaining the company position. But they were unable to provide any example of what management did to balance union efforts on the four subjects mentioned above. “We just did not find any, in our whole search of 700 company magazines,” they said. Accordingly, they be-

lieve that management should take another look at what its own employee publications are for; at what they can do; at what questions should be raised in them. Too often, they maintain, the policy seems to be one of ducking controversial issues in employee publications, presumably on the grounds that employees would not read such material or would not believe it, and would resent its inclusion. “We don’t believe any one of those . . . reasons has a shred of validity.”

As a plan of action, these are the authors’ suggestions:

Charge your editor with making this job a part of his editorial plan. After he gets over the first shock, this will be easy. . . .

Do all you can to help him get at the facts, but let him see to the writing and editorial work. . . .

See that he gets every union publication reaching your people. He needs to know what he is up against.

Send him to talk to key people in the national organizations that are working to tell the story of free enterprise. . . .

Overlook no means of carrying your message to your employees. Use other in-plant communications systems—such as the reading rack, bulletin boards, even letters direct from the company presidents—to reach all employees, not just supervisors, when the issue is vital enough to justify it.

THERE is nothing particularly complicated about going into this battle with both hands, the authors conclude. The facts are available; they just are not being used. The outlet is the employee publication—also not being used. Since the unions are already in the ring, the question is whether management will get in the ring too, as the authors believe necessary, or lose the battle for the minds of its people on an editorial TKO.

The March of Events



REA Loans

THE Rural Electrification Administration made six electrification loans totaling \$6,991,000 in Oregon, Colorado, Montana, New Mexico, South Dakota, and Wyoming during the week of August 1st to 5th, the U. S. Department of Agriculture announced recently.

Loans included one of \$2,280,000 to San Isabel Electric Association of Pueblo, Colorado, for the purpose of acquiring and rehabilitating properties of the Frontier Power Company in Colorado. (See page 350.)

Some 400 rural families will get electricity for the first time and a large number of existing consumers will get better service as a result of the loan.

A loan of \$3,500,000 was made to the Rushmore Generating & Transmission Electric Co-operative of Rapid City, South Dakota. Rushmore is a federation of six REA-financed distribution co-operatives. Funds from the loan will be used by Rushmore to finance a 16,500-kilowatt steam-generating unit which will

supply power for the Tri-County Electric Association, a member co-operative of Sundance, Wyoming.

The new unit will be located adjacent to the plant of the Black Hills Power & Light Company at Kirk, South Dakota. Under terms of an agreement between Rushmore and Black Hills, the company will construct, lease-operate, and integrate the unit into its system. It was estimated that the Rushmore-Black Hills agreement would result in a 30 per cent reduction in the cost of wholesale power to the Tri-County Association.

Loans approved by REA early last month will also finance construction by four borrowers of 528 miles of distribution line to serve 1,544 new rural consumers and system improvements, including 13 miles of tie line and 92 miles of transmission line. Douglas Electric Co-operative, Roseburg Oregon, will receive \$150,000; Big Horn County Electric Co-operative, Lodge Grass, Montana, \$180,000; Springer Electric Co-operative, Springer, New Mexico, \$256,000.

Arizona

Gas Rate Rise Authorized

THE state corporation commission last month authorized Southern Union

Gas Company, Dallas, to boost its natural gas rates in four northern Arizona counties by whatever amount is necessary to increase current earnings on its invest-

PUBLIC UTILITIES FORTNIGHTLY

ment from an estimated 4 per cent to 6.25 per cent.

The rate hikes will not go into effect un-

til the company presents a new rate schedule and has it approved by the state commission.

California

Revenue Bond Election Planned

THE president of the board of directors of the Sacramento Municipal Utility District, announced early last month that officials of the agency were giving serious consideration to a bond election this year to authorize the sale of an \$85,000,000

revenue bond issue for the district's proposed 200,000-kilowatt Upper American river hydroelectric project.

He said a three-man consulting board had been retained to review the project, which also would provide additional water for the city and the Sacramento metropolitan area. The board will submit a report to the district late this fall.

Colorado

Bond Issue Approved

A PROPOSED \$1,756,000 bond issue for municipal acquisition and expansion of power facilities now owned by the Frontier Power Company was approved last month by the voters of Walsenburg, Frontier, which has owned and operated the power system in the southern Colorado city for forty years, has offered its Walsenburg power plant to the city for

\$756,000. It includes a 6,000-kilowatt generator and a 3,000-kilowatt stand-by generator, plus substations and other facilities within the city.

Remainder of the bond money would be used to finance the purchase and add new equipment.

The new municipal setup will be managed by a utility board headed by the mayor, and including one city councilman and three businessmen.

District of Columbia

Transit Strike Ends

STREETCARS and buses began rolling August 22nd for the first time since July 1st. New fares are 20 cents cash, five tokens for 95 cents.

President Eisenhower had previously approved a scheme designed to end Washington's streetcar and bus strike. The bill cancels the franchise of the Capital Transit Company to operate the streetcar and bus system after one year. In the meantime, the three District of Columbia commissioners were authorized to contract with Capital Transit or any other

company to operate the system on a no-profit and no-loss basis.

The District government would also work out a contract with the 3,000 drivers and mechanics who have been out on strike since July 1st, and would be responsible for making up to the company any losses it might have during the year's interim operation. At the end of the year, the District government would have to find another company to run the transportation system or run it itself.

In signing the bill, the President noted he is opposed to any attempt to settle labor

THE MARCH OF EVENTS

disputes through legislation of the type passed. But he went on to say that "the law creating the Capital Transit Company more than twenty years ago established a direct relationship between the company and the Congress in that Congress reserved to itself the power of determining the termination date of the company's franchise."

Mr. Eisenhower added that both Congress and the District commissioners "have concluded that Capital Transit Company, beginning several years ago and continuing up to the present time, has failed to measure up to its responsibilities as a public utility."

Capital Transit is controlled by Louis E. Wolfson and a group of his associates.

Kentucky

Utility Sues to Halt Line

UNION LIGHT, HEAT & POWER COMPANY took court action last month to prevent the East Kentucky Rural Electric Co-operative Corporation from building transmission lines from Berlin, Bracken county, to Grant's Lick, Campbell county, and from Union, Boone county, to Williamstown.

The northern Kentucky utility asked the Franklin circuit court for a restraining order to bar the construction, already approved by the state public service commission.

Union pleaded the proposed lines would cause the private utility to lose its second largest customer, Owen county, without due process of law.

Massachusetts

Study Legislation Signed

GOVERNOR Herter last month signed into Massachusetts law a measure

providing for a comprehensive study of the feasibility of putting electric and telephone utility lines underground.

Michigan

Utility Disputes Ruled outside Law

SPECIAL fact-finding commissions for mediating management-labor disputes at utilities like Detroit Edison Company which are engaged in interstate commerce were ruled out recently in Michigan.

The ruling came from Attorney General Thomas M. Kavanagh, who said the 1939 state mediation machinery could not be used in such disputes.

An opinion was asked last July by George E. Bowles, chairman of the State Labor Mediation Board, when a dispute

between the Utility Workers Local 233 (CIO) and the Detroit Edison Company threatened to erupt in a strike.

The strike threat ended, however, when the employees voted to accept a settlement proposed by the company.

The utility union had long contended that Michigan law did not apply and had sought to make test cases of previous disputes at Consumers Power Company and Detroit Edison.

Refund Hearing Set

HALF a million Detroit area customers of the Michigan Consolidated Gas

PUBLIC UTILITIES FORTNIGHTLY

Company were notified early last month that long-delayed rate refunds were in sight. The public service commission set September 1st for a hearing to determine the "exact amount to be refunded, the method of making the refund, and the manner in which the amount to be refunded to the individual customer shall be determined."

Michigan Consolidated will receive \$4,-841,186 and accrued interest from the Michigan-Wisconsin Pipe Line Company

on so-called overcharges from October 1, 1951, to November 30, 1954, when the Federal Power Commission finally set a rate on gas sold to Michigan Consolidated.

A spokesman for the commission said only about 75 per cent of the refund to Michigan Consolidated was due for further refunding to the general public. "The other 25 per cent of the gas involved went into storage or was sold in the Mt. Pleasant district at no increase in rates," he said.

Missouri

Commission Rules on Utility Levies

ASPLIT ruling handed down last month by the state public service commission held that municipal gross receipts on license taxes assessed against a telephone company can be passed on to the consumers as an added charge on the monthly bill for service.

Commission Chairman Tyre W. Burton, who with Commissioners E. L. McClintock and D. D. McDonald concurred in the majority, said the ruling establishes a new policy in public utility regulation in Missouri.

Under present policy, Burton said, license taxes levied by municipalities against utilities are considered a part of the operating expense in determining rates to the public.

Even though the ruling applied specifically to Western Light & Telephone Company, Inc., which furnishes services in 36 Missouri cities, Burton said applications for permission to pass the tax to the public have been filed by the Southwestern Bell Telephone Company on its Kansas City operations, the Kansas City Power & Light Company, and other utilities which pay gross receipts or license taxes. They

will be considered individually on their merits.

A dissenting opinion was submitted by Commissioners C. L. Hensen and M. J. McQueen, who said the majority opinion was in conflict with state supreme court decisions, including one involving the St. Louis County Water Company.

Western Light & Telephone was authorized to increase its consumer rates to produce an additional \$85,500 a year in additional revenue so as to earn a return of 6.20 per cent on an average rate base of \$2,389,379. Chairman Burton said the additional revenue was considered necessary regardless of what disposition the commission made of the company's request to pass on the gross receipts taxes.

It was ruled that gross receipts and license taxes are discriminatory against the consumers if included as operating expenses on a system-wide basis. Only 25 of the 36 cities served by Western Light levy such taxes, which range from a flat rate of \$12.50 to 5 per cent of the gross receipts of the exchange. The prevailing opinion said the discrimination could be removed by permitting the company to pass the tax to the subscribers of the exchanges in the cities where the tax is imposed.

THE MARCH OF EVENTS

Nebraska

Decision Date Set

DISTRICT Judge H. Emerson Kokjer recently set September 9th as the date he hopes to reach decisions in the complicated legal battle over Nebraska's public power. Involved in the suit are Nebraska hydroelectric districts, Consumers Public Power District, and a group of associated rural public power districts. Kokjer was in Columbus early last month to hear final arguments in the lawsuits that were to begin in April, 1954. He said he would study the volumes of testimony, exhibits, and briefs.

Among the salient points of the cases which Judge Kokjer must decide is whether Consumers is contractually bound to purchase substantially all of its power from the Nebraska Public Power System until 1972. Around this decision would hinge the question of whether Consumers could generate some of its own power, as it wants to do.

Another issue that must be decided is whether or not all "cost-of-service" contracts between the hydros and the rurals, Consumers and the city of North Platte should be declared null and void. The hydros have asked that the "experimental" contracts be so declared and that the status of 1946 be restored. This would return

the electrical customers of the hydros to a fixed-rate basis.

At issue also is the setup of the budget board and the planning board.

Public Power Pool Dispute Settled

A CONTROVERSY over payments to a public power pool has been soothed, at least temporarily. Norris Rural Public Power District has refused to make payments to the pool since January 1st on the grounds that such payments are illegal.

The board of directors of Norris district, however, recently agreed to make up these back payments, according to the manager of the district's headquarters in Lincoln. He said the board's action was on the basis of results they expect to receive from a decision in a public power lawsuit being tried at Columbus, early last month.

The manager said Norris district could save \$25,000 to \$30,000 a year by withdrawing from the pool. He said it has been the opinion of the board that each rural district should stand its own costs of transmission.

The pool method has been used for charging rural districts for power bought from the Nebraska Public Power System.

New Jersey

Customers Get Refunds

REFUNDS totaling \$418,000 will be made by Public Service Electric & Gas Company to its customers on gas bills from September through December, and on electric bills from October through December.

Individual rebates will run from about four to 12 cents a month.

The rebates result from the return to Public Service of excess charges for natural gas bought from suppliers, as determined by the Federal Power Commission. The state commission announced \$288,000 would be rebated on gas bills and \$130,000 on electric bills of Public Service customers throughout the company's entire territory.

PUBLIC UTILITIES FORTNIGHTLY

Phone Hog Bill Conditionally Vetoed

GOVERNOR Meyner last month conditionally vetoed a New Jersey legislative bill to provide penalties for persons "hogging" telephone party lines when a line is needed for reporting an emergency.

In commenting on the bill, the governor said he felt the definition of a violation of the proposed law as a misdemeanor was too severe. The penalty would be a maximum prison sentence of three years or a fine of \$1,000, or both.

The penalty, Meyner said, would discourage grand juries from indicting violators and hamper prosecutions. He sug-

gested that violators be classed as disorderly persons, subject to a maximum of a year's imprisonment or a fine up to \$1,000, or both.

The governor was also critical of a provision requiring that every telephone directory printed and distributed after January 1st to the general public shall contain a warning notice setting forth the substance of the proposed new law. Noting that many New Jersey subscribers had their numbers listed in New York or other out-of-state directories, Meyner said the wording of the bill would require printing of the notice in such directories. He suggested an amendment which would exempt the out-of-state directories from the requirements.

New York

New Rates Approved

APPROVAL of new rate schedules for commercial and industrial power consumers of the Long Island Lighting Company was announced recently by the state public service commission. The new charges were made effective August 11th.

The commission called establishment of the changes another step toward greater equity in the company's various service classifications. They involve higher

charges for some customers, aggregating \$448,000 a year. Other consumers will have lower rates, effecting a total decrease of \$132,000. Adjustments in residential rates were effected some time ago.

The greatest single new change was cancellation of a 5 per cent discount, which had been in effect for 400 customers in the last few years. This would bring the company \$258,300, it was said. Four large industrial consumers will pay an additional \$106,000 a year.

Oregon

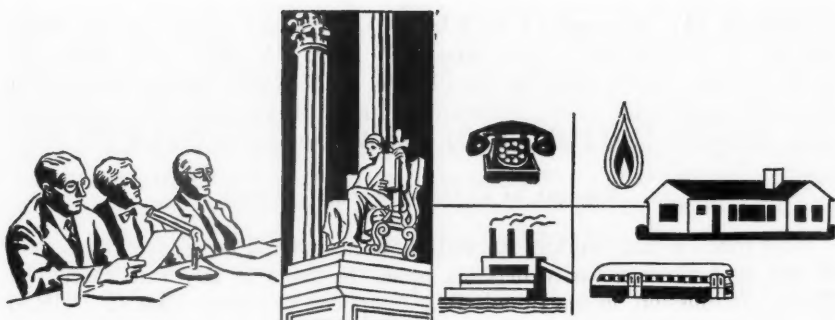
State OK's Snake Dams

THE state hydroelectric commission announced recently it had granted preliminary permits to the Pacific Northwest Power Company for the proposed Pleasant Valley and Mountain Sheep hydroelectric projects on the Snake river. Preliminary permits previously were granted by the Federal Power Commission.

The proposed projects are located in

Wallowa county in Oregon and in Ida county, Idaho. The Pleasant Valley project would use 25,000 cubic feet per second of the waters of Snake river to develop 1,042,613 theoretical horsepower under a head of 367 feet. The powerhouse would provide for the installation of 600,000 kilowatts of generating capacity.

The reservoir which would be formed for the Pleasant Valley dam would create a pool 34 miles long backing water to the Hell's Canyon dam site.



Progress of Regulation

Regulatory Trends

THE spreading tendency among regulatory authorities to reduce working capital as a basis for rate fixing was noted in *Public Utilities Fortnightly*, Volume 49, No. 13, page 855, June 19, 1952. Reference was made to the so-called "alternative funds" theory whereby funds reserved for the payment of taxes were considered a part of the company's cash working capital. This *Fortnightly* reference was cited by the New Hampshire supreme court in the *Chicopee Manufacturing Company Case* (98 PUR NS 187, 195). The court said that effective arguments could be made both for and against the deduction of income tax accruals from cash working capital and that it was undesirable to freeze this determination of fact into a legal proposition which must be applied in every rate controversy.

Accrued Taxes Offset Working Capital

The view quite generally adopted is in harmony with that of a Pennsylvania court, which said that no working capital allowance should be made if the financial situation of a company shows that sufficient funds are readily available to bridge the gap between the rendition of service and payment for service (94 PUR NS 353). As stated by the New Jersey commission, the amount claimed for working capital should be reduced when tax accruals are actually used by a company for every corporate purpose for which cash is required (91 PUR NS 161). In the words of the North Dakota commission (2 PUR3d 93), working capital should include only that amount furnished by investors.

The practice of offsetting tax accruals against cash working capital requirements has been approved in Arkansas (2 PUR3d 1), California (75 PUR NS 379, 400), Connecticut (2 PUR3d 452), Florida (99 PUR NS 129), Georgia (93 PUR NS 277), Idaho (8 PUR3d 265), Illinois (7 PUR3d 493), Indiana (6 PUR3d 441), Kentucky (6 PUR3d 18), Massachusetts (6 PUR3d 303), Maine (7 PUR3d 1), Michigan (5 PUR3d 301), Minnesota

PUBLIC UTILITIES FORTNIGHTLY

(2 PUR3d 33), Missouri (8 PUR3d 490), Nebraska (97 PUR NS 394), Nevada (2 PUR3d 342), New Jersey (99 PUR NS 393), New York (92 PUR NS 33), North Carolina (3 PUR3d 307), North Dakota (2 PUR3d 93), Ohio (8 PUR3d 136), Oregon (1 PUR3d 1), Pennsylvania (6 PUR3d 341), Tennessee (100 PUR NS 33), and Washington (100 PUR NS 309).

Amount of Offset for Tax Accrual

How much a cash working capital allowance should be reduced by reason of tax accruals necessarily depends upon the facts in any rate case. The Illinois commission, in the Illinois Bell Telephone Company Case (7 PUR3d 493, 503), disallowed working capital entirely where tax accruals were over twice as large as the claim for working capital and would be in the foreseeable future. The commission noted that the company did not segregate its tax accruals, so that there was no question of using funds earmarked for the payment of taxes as working capital. Consideration was given by the Wisconsin commission to the fact that about 75 per cent of the funds accrued for income taxes was available at all times to meet a company's cash requirement (100 PUR NS 71).

The Federal Power Commission has adhered to its "conventional method of computing working capital" for natural gas companies by allowing one-eighth of cash operating expenses, exclusive of purchased gas, plus average materials on hand and prepayments, minus "75 per cent of federal income tax accruals." This policy was described in the Panhandle Eastern Pipe Line Company Case (3 PUR3d 396, 437), where the company sought to substitute what it called the "investment approach." As noted by the commission, the FPC policy was approved by the courts in the Alabama-Tennessee Natural Gas Company Case (99 PUR NS 141) and the Northern Natural Gas Company Case (1 PUR3d 310).

The new pay-as-you-go system established for corporations by the 1954 Revenue Code is likely to have an effect on the amount of tax accruals which may be offset against working capital. The Louisiana commission, in a rate decision in 1954 (7 PUR3d 566), went so far as to allow the full working capital because "new tax laws provide that future income taxes are to be paid on a more current basis than in the past." The Wisconsin commission, however, in a case decided this year on figures submitted for 1953 and 1954, said that since the company had the use of income tax accruals, the need for a cash working capital allowance to cover the lag between receipts and payments was eliminated (9 PUR3d 81).

Limitations on Offset Rule

Cash working capital has been distinguished from materials and supplies in considering this question. For example, in a case before the Pennsylvania commission in September, 1954 (6 PUR3d 341, 349), a city deducted three-fourths of the estimated state and federal income taxes for the reason that "under future time schedules of payments of income taxes as required by the

PROGRESS OF REGULATION

Bureau of Internal Revenue" the company would have use of the tax accruals for more than three-quarters of a year on the average. The commission said that the city was attempting to expand the decisions of courts on the application of accrued taxes to offset a claim for cash working capital. The commission quoted from a court decision (5 PUR3d 129) to the effect that while tax accruals may properly be used to eliminate a hypothetical cash working capital allowance, the same principle does not apply to materials and supplies, which represent inventories of tangible property owned by the utility and required in rendering service. The claim for materials and supplies did not appear unreasonable and was allowed.

Various taxes and other accumulations have not been used as an offset, on the ground that they are in a different category than income tax accruals. Federal excise taxes on telephone service and employees' portion of social security taxes were not considered by the California commission to be available to a telephone company as working capital since the company acted merely as a collection agency for the federal government (75 PUR NS 379). Income tax accruals were used as an offset.

The New Jersey commission, in the New Jersey Bell Telephone Company Case (78 PUR NS 97), said that excise taxes, employee contributions for old-age benefit tax, and employee contributions for state unemployment insurance, representing amounts as to which a telephone company merely acts as a collector for governmental authorities, never become the property of the company and cannot properly be deemed available as an offset against cash working capital requirements.

But in the Consolidated Edison Company Case (96 PUR NS 194), the New York commission offset against working capital, deductions from employees' salaries and wages such as social security deductions, income taxes, automobile insurance, war bond purchases, union dues, and company association and hospitalization dues which were said to be available.

Objections to Tax Accrual Offset

The Virginia commission, in 1950 in the Chesapeake & Potomac Telephone Company Case (85 PUR NS 435), took the position that a working capital allowance should not be denied because a company has on hand large sums of taxes collected for governmental authorities since such money never becomes the property of the company and it cannot be considered available for working capital. The Virginia supreme court of appeals sustained the commission's decision (89 PUR NS 33) without commenting on the tax offset question.

In a later case before the Virginia commission opponents of a rate increase asserted that no cash working capital was required because the company accrued federal taxes in amounts in excess of amounts included as cash working capital. The commission adopted the view that tax accruals cannot properly be used to offset the requirement of cash working capital because tax collections are not all available to the company for working capital purposes. In

PUBLIC UTILITIES FORTNIGHTLY

addition, the company requires cash working capital to operate its business and this capital is held by the company at its risk in the business. The Virginia supreme court of appeals upheld this action of the commission (8 PUR3d 120).

The same view was expressed in Nevada, but changed in a later decision. The commission, in fixing rates for the Bell Telephone Company in 1949 (82 PUR NS 529), noted that the company was required to keep a minimum deposit in banks and that these dollars were not fluid dollars that could be offset by tax money as access to these funds was in the hands of others than the treasurer of the company, who was responsible for keeping intact tax dollars collected. The commission, in reply to a contention that the company was entitled to no working cash because of accrued taxes, said that for the commission to condone such a practice might have a disastrous effect upon the company's operations. But in a rate case in 1951 involving the same company, the commission said it did not agree with the opinion of a majority of the former commission as to the working capital allowed. Money derived from advance deposits plus tax accruals collected in advance was on hand to cover current operating expense (90 PUR NS 287).

Review of Current Cases

Financing of Main Extension by Surcharge Approved

THE California commission approved a gas company's application for authority to construct and operate a natural gas project in a territory for which it had obtained a franchise from county authorities and for authority to consummate contracts with two chemical corporations. The commission noted that no opposition appeared to the service extension into the franchise territory, that the company appeared to be in a position to finance the project, and that there was a public need for service in the area.

Financing of Main Extension

The commission commented at some length on the proposal regarding the extension of company mains to the two privately operated plants. The company indicated a willingness to waive the requirements of its rule regarding main extensions which required that customers pay the cost of extensions. Instead of collect-

ing for the extensions in this manner, the company desired to add a surcharge of two cents per Mcf on all interruptible gas consumed until a stated amount of gas had been delivered. The capital costs of construction, according to the company's proposal, would be treated as customer contributions in aid of construction and would not "earn a return for rate-fixing purposes."

The commission, in granting the company's application regarding the chemical plants, said that the proposed service was "a desirable load, which would benefit system operations as a whole, and which could not be obtained if the chemical corporations were required to advance the cost of the extensions."

Local Service

The company was directed to determine the gas requirements of communities along the route of its pipeline and, where

PROGRESS OF REGULATION

economically feasible, to commence service upon obtaining necessary certificates and permits.

The company was directed to sub-

mit periodic reports to the state commission on this phase of the project. *Re Pacific Gas & E. Co. Application Nos. 36889-36891, July 12, 1955.*



Defective Wiring Basis for Electric Service Denial

THE California commission has upheld an electric company in its refusal to serve a dwelling having defective wiring. The company claimed that if it served the dwelling before the wiring was made safe, it would subject itself and its agents or employees to fine or imprisonment, or both.

A municipal officer, pursuant to city ordinance, had requested the company not to serve the residence because of the defective wiring.

Furthermore, the electric company's tariff stated that the company reserved the right to refuse service if the customer's lines, appliances, or apparatus should at any time be unsafe or if the utilization of electricity by means thereof

was prohibited by any municipal ordinance or regulation.

The commission said that in order for a complaining party to obtain relief, all the material allegations of his complaint must be sustained. The complainant has the burden of proof. In this case a necessary allegation was that "... no defect of any sort exists in the electrical service at" the residence. Complainants failed to produce sufficient evidence to support that allegation. Therefore, the commission said, it could not make the necessary finding that the wiring was safe and adequate. For this reason it dismissed the complaint. *Clark et al. v. Pacific Gas & E. Co. Case No. 5601, Decision No. 51639, July 5, 1955.*



Does "Not Guilty" Verdict in Gambling Case Require Telephone Restoration?

A TELEPHONE company was ordered by the New York supreme court to restore business service to an insurance broker who had been acquitted of the gambling charges which had caused his service to be terminated. The broker had shown that the phone was necessary to him; that the business he operated had been started in 1907 by his father; that the suite which he occupied was shared with two attorneys; that he had never before been arrested for any crime.

Company Responsibility

The court carefully reviewed the law

regarding such cases. Generally speaking, a company has the power and the duty to withhold its service from persons using it for unlawful purposes. The company, the court continued, may consult with the police but has the responsibility of making the decision as to whether service should be restored.

Effect of Acquittal

The subscriber's acquittal in criminal court does not, of itself, prove the falsity of the charge. The difficulty of formulating a precise rule to cover such a situation was pointed out. "The evaluation of all

PUBLIC UTILITIES FORTNIGHTLY

the circumstances relevant to the restoration of service, including the balancing of petitioner's rights and needs as well as the public's interest in preventing use of the telephone for illegal acts, is the proper function to be performed in this proceeding."

The court referred to two earlier cases in which the effect of an acquittal had been considered in relation to the discontinuance of telephone service. In the Restmeyer Case (1916) 173 App Div 132, 159 NYS 369, restoration was denied notwithstanding the acquittal which the subscriber relied on exclusively. In the Salter Case (1946) 68 PUR NS 162, 67 NYS2d 396, telephone service

was ordered restored where no acts were charged against the subscriber other than those of which he was acquitted, so that on the record before the court no alternative to restoration was deemed open.

Phone Number after Restoration

The right of the subscriber to his former number upon restoration was also considered. The court said that there is no proprietary right to a telephone number. Consequently when a discontinued service is restored, "the number to be given and the timing thereof within reasonable limits is left to the discretion of the telephone company." *Rosenthal v. New York Teleph. Co.* 141 NYS2d 459.



Rate Concession to Customers of Acquired Utility Disregarded in Estimating Revenues

IN computing an electric company's revenues for rate-making purposes, the California commission disregarded rate concessions granted customers of a recently acquired utility and computed the revenue as though the full general service revenue was being obtained.

The lower rate charged by the company was for the purpose of providing a transition period from the level of the former company's rates. The commission would not permit such concession to burden the company's other customers.

The company was granted an increase so as to produce a return of 5.9 per cent,

which the commission considered fair and reasonable. The straight-line remaining life method was used by the commission in computing the depreciation allowance for the test year.

The method of estimating ad valorem taxes was discussed. The commission held that estimates based on rates applicable to the most recent periods were to be preferred over estimates based on the average over a number of years since the tax rates had a past history of fluctuating wildly. *Re San Diego Gas & E. Co. Decision No. 51687, Application No. 36579, July 18, 1955.*



Municipal Acquisition of Telephone Plant Disapproved

THE Missouri commission denied a fourth-class city's petition for approval of its acquisition of a telephone plant which has been serving the city and its environs, on the ground that the city

lacks authority to furnish extraterritorial service. Its power to own and operate a telephone exchange as a municipally owned utility was not questioned, but no statute applicable to cities of the fourth

PROGRESS OF REGULATION

class provides for the conduct of such an operation beyond the city limits.

The commission concluded that by approving the sale it would be giving sanction to an illegal undertaking on the part of the city in operating a telephone system beyond its borders. In discussing whether ownership of utility properties beyond the city limits would be exempt from regulation, the commission pointed out that if

such operation were totally exempt, those persons beyond the city limits would have no adequate remedy for complaints as to service and rates. They could not obtain relief from the commission and would have no safeguard through elective processes to rectify their situation, since they would have no vote or voice in the city government. *Re Hutts et al. Case No. 12,792, May 12, 1955.*



Commission Asserts Jurisdiction to Regulate Switch Track on Nonrailroad Property

THE Missouri commission denied a railroad authority to abandon a switch track located on private property which the railroad did not own. The railroad had contended that its duty to provide switching service, as well as a shipper's right to insist upon it and the commission's authority to compel such service, did not extend to the maintenance and operation of a track laid wholly upon private property.

The commission based its decision upon the holding in *Missouri Southern R. Co. v. Missouri Pub. Service Commission*, 279 Mo 484, PUR1919F 584. In that case, it was held that the fact that the railroad was operating tracks under rates

filed with the commission was sufficient to warrant a finding that it was using them in the public service.

Although some evidence was offered tending to show that the railroad was performing the service at a loss, the commission did not think it sufficient to justify abandonment. The evidence of costs pertained only to the cost per car operation. The general scheme of rates of the company had not been submitted. While one particular part of a railroad operation might be unprofitable, the commission held, the entire rate picture had to be considered before authorizing abandonment. *Re Kansas City Terminal R. Co. Case No. 13013, June 3, 1955.*



More Route Designators on Buses Refused

THE supreme court of Rhode Island upheld the denial of a petition for an order requiring a transit company to display route and destination designators on the rear and left sides of buses, in addition to designators already used on the front and right sides. The petitioners, electors of the state, claimed that the existing service was inadequate and unreasonable because of the inconvenience sustained

by bus riders approaching the vehicles from the rear or left sides and finding no designators there to inform them readily as to routes and destinations of the buses.

Considering the issue of reasonableness and adequacy of the transit service with respect to the route and destination signs, the court took note of the evidence relating to the claimed inconvenience, but said that such inconvenience was merely one

PUBLIC UTILITIES FORTNIGHTLY

of the elements to be considered in determining whether such service could be provided at a reasonable cost. Other testimony showed that signs on the rear of the buses were subject to loss by damage and vandalism, that the cost of maintaining them would be entirely out of proportion to the public need, and that very few similar companies display such signs. Moreover, it was shown that the company had received no complaints or requests

from the general public indicating a need for additional designators.

The court decided on this record that the great preponderance of the evidence supported the order denying the petition. It observed, also, in passing, that the request for the additional signs was not outside the scope of the jurisdiction of the commission, as the company contended. *Berberian et al. v. Rhode Island Pub. Utility Hearing Board*, 114 A2d 677.



Motor Carrier Application Denied for Want of Customer Witnesses

THE Colorado commission denied an application by two copartner truck owners for authority to operate as a private motor carrier on the ground that the applicants failed to make a *prima facie* case.

Although the application was vigorously protested by other interested carriers who testified that existing facilities were adequate, the applicants produced no customer witnesses.

Reiterating its position taken on numerous other occasions, the commission asserted that where private carrier applications are protested, the applicants must produce customer witnesses to testify that existing service is inadequate and that they will use the proposed new service. These requirements not being met, the commission denied the application. *Re Eastwood et al. Application No. 13376-PP, Decision No. 44294, June 3, 1955.*



ICC Order Finding No Discrimination by Railroad Against Shipper Upheld

A SHIPPER of manufactured products sought from the Interstate Commerce Commission a determination that a railroad had unlawfully discriminated against him in failing reasonably to supply an adequate number of boxcars upon request. The evidence indicated that while this shipper was not in fact adequately supplied in this respect, a serious shortage of cars existed.

The commission found no discrimination and consequently denied reparation for damages claimed, as well as other relief requested. Upon recourse to the

United States district court, that tribunal decided that the order was not supported by substantial evidence, but the United States court of appeals, in turn, reversed the lower court and upheld the commission, though a strong dissent from this latter judgment was voiced.

Whether the practices of the railroad under the surrounding circumstances were reasonable or unduly prejudicial, said the appellate court, is a factual question for the determination of the commission in its sound judgment and discretion. The court declared that an order must not be

PROGRESS OF REGULATION

judicially set aside if it is within the commission's statutory power and is supported by substantial evidence; and such was found to be the fact in this case. Moreover, the opinion asserted, it is beyond the province of a court to consider

the weight of the evidence before the commission, or the soundness of the reasoning by which its conclusions were reached. *Interstate Commerce Commission v. Martin Bros. Box Co.* 219 F2d 811.



Exception to Customer Witness Rule On Motor Carrier Application

THE Colorado commission granted a limited authority to a private motor carrier to operate in an area already served by a common motor carrier, though the applicant produced no customer witnesses. Because of the special circumstances of the case, the commission was disposed to make an exception to its general rule that where an applicant seeks authority to operate in territory being served by another carrier and the application is protested, he must produce customer witnesses who will testify that the existing service is inadequate and they will use the new service.

Here the applicant was authorized to

haul lumber for a particular customer whom the common carrier was unable to engage. In fact, the common carrier had solicited business in the whole general area without success. Under the circumstances, the commission said, the present holder of authority could not expect to foreclose any other operation in the territory if it could not obtain the business for itself. Its operations will not be adversely affected, said the commission, by a grant of the new limited authority, since it cannot be injured by losing business that it cannot obtain. *Re Powell, Application No. 13412-PP, Decision No. 44366, July 1, 1955.*



"Tax Equivalent" in Municipal Utility Rate Making

THE Wisconsin commission has adopted a rule for the establishment of a "tax equivalent" for municipal electric and water utilities. A statute of that state specifies certain requirements to be met from the income of municipal utilities, including "local and school tax equivalent." In determining service rates the municipal authorities must, of course, allow for the "tax equivalent."

Reasons Whereof

That account having apparently acquired a somewhat uncertain character during the recent inflationary years, and since in establishing a "tax equivalent"

the municipalities and their utilities have not dealt at arm's length, the commission found it necessary, as a practical matter, to prescribe a rule by which the amount may be specifically determined. The new rule, the opinion indicated, has become necessary to enable the commission to properly administer the statutes pertaining to the regulation of municipally owned utilities.

The Rule

Under the new rule the "tax equivalent" for all municipal electric and/or water utilities may be determined by either of two methods:

PUBLIC UTILITIES FORTNIGHTLY

(1) Apply the local and school tax rate to the gross book value of plant plus materials and supplies multiplied by the ratio of assessed value to full value as found by the Wisconsin Department of Taxation for the community involved; or

(2) Apply the local and school tax rate to the net book value of plant plus materials and supplies.

In both methods property outside the corporate limits should be excluded from the computation. It was provided, also, that if a greater "tax equivalent" than that obtainable under either of the prescribed methods was desired, approval of the commission must be secured. *Re Tax Equivalent for Municipal Utilities*, 2-U-4447, July 11, 1955.



Valuation of Property in State Not Condition Precedent To Fixing of Intrastate Freight Rates

THE Ohio supreme court affirmed a commission order authorizing a railroad freight rate increase. The court was of the opinion that, under applicable statutes, a valuation of the railroad's property in the state was not a condition precedent to the fixing of the rate, although the commission could require any information it deemed pertinent regarding the value of such property. The need for increased revenues from Ohio operations, thought the court, could be shown solely by aggregates of system-wide statistics.

Railroads, by statute, were excepted from the definition of a public utility, and the methods in fixing railroad rates were

differentiated from those used in fixing the rates of other public utilities. Provisions making mandatory a detailed inventory and appraisal of property used and useful in rendering service were applicable only to the fixing of rates of public utilities and, therefore, excluded railroads.

The commission could, according to the court, consider relative and proper findings of the Interstate Commerce Commission and the evidence from which such findings were made, in fixing intrastate railroad freight rates. *Ohio Coal Asso. v. Ohio Pub. Utilities Commission*, 164 Ohio St 108.



Officer's Testimony Did Not Estop Commission From Revoking Corporation's Certificate

THE Ohio supreme court, in reviewing a contract carrier certificate revocation, reported in 7 PUR3d 275, held that the commission's action was not unreasonable. From the evidence, the commission could justifiably find consistent regularity in weight and load violations, with full knowledge on the part of a number of the company's agents and employees, and conclude that such illegal activities were part of the day-to-day pat-

tern of operations conducted by the company and either approved or condoned by its officers and directors.

The company cited a statute which prohibits the prosecution or penalizing of a person who has given testimony which might tend to incriminate him, or the imposition of a forfeiture. Since its president had testified regarding the company's transactions, the contention was advanced that the commission was estopped from

PROGRESS OF REGULATION

taking disciplinary action against the company.

The court concluded that the contention was untenable. A forfeiture, the court said, is a divestiture of property without compensation in consequence of some default or act forbidden by law. A penalty is a sum of money exacted by way of punishment for the doing of some act which is prohibited, or from omitting to do something which is required to be done.

A certificate or permit issued to a motor transportation company is a revocable license which confers no property rights upon the holder. Since the revocation of a permit or a certificate could not divest the holder of any property right, and

since the payment of a sum of money was not involved in the instant case, the revocation of the permit could easily be distinguished from both a penalty and a forfeiture.

Furthermore, the court pointed out, the statute provides that the person who testifies shall not be prosecuted or subjected to any penalty or forfeiture. In this case the person who testified was the company's president and he was a person separate and distinct from the company. Corporations were not entitled to all the constitutional immunities and protections in private security which private individuals had. *Ohio Transport, Inc. v. Ohio Pub. Utilities Commission*, 164 Ohio St 98.



Small Water Utility Denied Rate Increase as Reimbursement For Extraordinary Expense

THE California commission denied the request of a small, rural water company for a rate increase of 350 per cent, claimed largely in order to compensate for an extraordinary expense of \$24,000 forced upon the company by law (though unjustly, according to the commission) as a result of a highway realignment and a consequent relocation of pipelines. The company served only eighteen customers and had operating revenues of just \$1,200 for the preceding year.

Although much concern was expressed about the application of a law that might unjustly bankrupt the small utility by

forcing it to incur such an unduly heavy expense, the commission found it impossible, within the bounds of reasonableness, to allow a rate increase great enough to reimburse the company.

After rejecting a claimed over-all 10 per cent depreciation expense rate and prescribing therefor a rate of 1.40 per cent on depreciable capital, and adjusting the rate base accordingly, the commission authorized new rates sufficient to produce a return of 5.2 per cent, which it determined to be reasonable. *Re Yerba Buena Water Co. Decision No. 51694, Application No. 35887, July 18, 1955.*



Contract Water Carrier Not Public Utility

UPON complaint by a number of water subscribers to bring a water transportation business under commission regulation, the Colorado commission decided that the business was not a public utility

and, therefore, was not subject to its regulation.

The Facts

Although the operator of the business

PUBLIC UTILITIES FORTNIGHTLY

owned the pipelines through which water was conveyed to the consumers, he actually operated under a contract with the city of Denver which owned the water and reserved the right to refuse service at will to any of these consumers since they were located outside the city. All purchases of water were made directly from the city.

As the contractor was compelled under his contract to maintain his facilities, he sought to assess each subscriber a sufficient amount annually to cover the necessary maintenance costs. It was this assessment which precipitated the instant proceeding.

Conclusions and Reasons

It appeared to the commission that the relationship between the operator of the pipelines and the subscribers whom he sought to assess was merely that of rep-

resentative of the city. Since, under the state law, the commission had no jurisdiction over the city water service, it therefore had none over this defendant.

The commission pointed out that the first requisite of a public utility is the right of the public to demand service. But the customers here concerned, being outside the city, had no such claim on the city water supply.

Furthermore, the defendant would be under no obligation to seek other supplies in the event the city supply should be shut off, for he had not held himself out to serve these subscribers beyond the limits of his contract with the city. In fine, the commission decided that these "outside water users" must remain at the mercy of the city of Denver and its surplus water supply. *Parrish et al. v. Cobb (Cobb Plumbing & Utility Co.) Case No. 5069, Decision No. 44292, June 3, 1955.*



Interim Financing Approved Despite High Debt Ratio

THE Securities and Exchange Commission has authorized Ohio Valley Electric Corporation to issue and sell for cash \$10,000,000 of interim debt notes due ninety days after demand to twelve of the fourteen institutions now owning its long-term notes. The company is engaged in the construction of generating and other facilities to supply power requirements of the Atomic Energy Commission.

Debt Ratio

The net effect of the proposal, as long as the interim debt remains outstanding, will be to substitute debt capital for equity capital to the extent of \$10,000,000 or $2\frac{1}{2}$ per cent of the total capital requirements, with the result that the company's capital structure will consist of $97\frac{1}{2}$ per cent debt and $2\frac{1}{2}$ per cent equity. Ord-

narly, the commission would not approve a capital structure with common stock equity of only $2\frac{1}{2}$ per cent. However, it reiterated its sentiments spoken when it approved the original financing of the company.

At that time the commission said that so long as the Atomic Energy Commission contract is in force, the interest and amortization requirements for the Ohio Valley corporation debt would be covered. In the event that the contract with the commission should be terminated, the sponsoring companies would be obligated to acquire all available power from Ohio Valley. The effect of this arrangement is that the sponsoring companies would supply the company with adequate funds to meet its debt requirements.

Furthermore, in the event of cancella-

PROGRESS OF REGULATION

tion of the contract between the company and the Atomic Energy Commission during the earlier years of the contract, cancellation payments would be made by the government to the company. Consequently, the commission concluded that the cap-

ital structure was permissible and consistent with the public interest and the interests of investors and consumers. *Re Ohio Valley Electric Corp. et al. File No. 70-3368, Release No. 12909, May 25, 1955.*



Motor Carriers Recover Judgment for Transportation Charges under Equalization Agreements

THE United States court of claims gave judgment for two motor carriers in actions brought by them against the United States to recover charges for the transportation of a large number of jeeps during 1942. The carriers operated under equalization agreements with the United States providing for the transportation of the vehicles at the lowest net land-grant charge for shipment by rail.

The court determined the amount due the carriers by taking the total number of jeeps shipped on any one day from a given factory to one destination and applying to the entire day's lot the net land-

grant rates for the shipment of such vehicles in boxcars, using either five or six to the car, whichever would result in the lower rate.

The court rejected the contention by the carriers that the individual bills of lading should govern in the determination of the amount due, for those records did not show the number of vehicles shipped from the factory to a particular destination on any particular day. Nor was any compensation allowed the carriers for unloading the vehicles of their own accord, since government crews were available to perform that task. *Commercial Carriers v. United States, 127 F Supp 197.*



Security Issues Authorized to Reimburse Treasury

THE New York commission authorized a water company to issue first mortgage 4 per cent bonds for private placement and new no-par common stock. The new security issues would reduce the company's debt ratio from 58.35 to 53.88 per cent, together with a corresponding increase in the equity ratio, and further improvement in the latter ratio would follow in consequence of the operation of the sinking-fund provisions contained in the indenture.

Despite a redemption feature and sinking-fund provision of the bond issue that failed to conform to the commission's

standards, the proposed issue was considered, as a whole, satisfactory. The rights of minority stockholders were believed to be adequately protected against the new issue of common stock at a minimum price of \$28 a share, since the market price was also \$28 and the book value \$29.13. In addition, pre-emptive rights were protected by appropriate provisions.

Use of Proceeds

During the preceding three years the company had expended large sums of money for property additions besides incurring a heavy short-term indebtedness

PUBLIC UTILITIES FORTNIGHTLY

for capital purposes. The proceeds from the sale of the new securities were to be used to reimburse the company's treasury, to discharge or refund obligations incurred for capital purposes, and to finance new construction.

Payment of Issuing Expenses

While payment of the expenses incurred in the issue of these securities was authorized out of the proceeds, the commission discussed at some length the propriety of such payments from that source. It pointed out that gross proceeds from stock issues must be used in measuring the amount of capitalizable expenditures forming the basis for the issuance of additional securities for reimbursement pur-

poses. Consequently funds needed to cover the expense of issuing stock must be secured from some source other than the proceeds of the securities and be utilized for capital purposes, in order that the securities held by the public may be supported to their full face amount.

Expenses in connection with the issuance of debt securities, however, may be paid from the proceeds of the issue since the amortization of such expenses will provide funds that can be used for other capitalizable expenditures to support the outstanding securities. But this principle would not normally apply to stock issues because a specific period for the amortization of such expenses cannot be determined. *Re Northport Water Works Co. Case 17279, July 19, 1955.*



Dump Truck Minimum Rates Increased

THE Massachusetts commission authorized dump truck operators to increase minimum rates and charges. The carriers alleged that existing charges had become entirely inadequate.

In addition to a sharp rise in labor costs, there was ample evidence of substantial increases in all other operating costs. In reviewing this evidence the commission observed that, besides taking notice of information in its own files, it might also draw from its own observation and experience.

Specific Increases Allowed

Increases of 50 cents in minimum hourly rates were authorized for trucks of varying capacity up to 28,000 pounds. For trucks above that capacity, a proposed \$2 hourly increase was denied, it being observed that such vehicles were of recent development and the costs involved in their operation were not yet adequately ascertained. But, because of the substan-

tial rise in operating costs generally, an increase of \$1 was granted for trucks of such capacity having two axles, while a \$2 increase was allowed for those having three axles. The order provided, however, that new hourly rates should apply only when the charges were to be paid by the state or a political subdivision, or when the hauls were made within the same city or within a 10-mile area.

In addition to the hourly rate increases, an increase of approximately 25 per cent was granted on tonnage and yardage rates. A slightly higher minimum rate was allowed on asphalt road mix for the reason that the handling of that commodity demanded special treatment and involved greater expense.

Rates Set at Minimum

The commission cautioned dump truck carriers not to expect consideration of petitions for rate increases until all reasonable measures had been taken to cor-

PROGRESS OF REGULATION

rect substandard conditions or other inefficiency in the industry. No guaranty of profit is offered to any particular operator. The commission pointed out that it does not purport to set rates; rather, it

intends only to establish a minimum level of charges below which efficient management cannot operate. *Re Dump Truck Owners Asso., Inc. of Massachusetts et al. DPU 10730, July 25, 1955.*



Motor Carrier Authority Granted in Part

THE Colorado commission authorized two copartners to operate as a private motor carrier for contract hauling of road-building materials intrastate, there being no opposition voiced, and the experience and financial responsibility of applicants satisfactorily established.

A second part of the application seeking approval of certain interstate operations was also granted, though as a matter of course; for the commission's power in interstate motor carrier operations is limited to the enforcement of safety regulations and the preservation of the highways.

The third phase of the application sought permission to carry dry ice and frozen products intrastate. This authority was opposed by certain interested common carriers, and the applicants failed to produce customer witnesses to prove the need for the proposed new service.

In these circumstances the state public utilities commission was compelled, in accordance with its own rule in such cases, to deny this part of the application and thereby protect the common carriers. *Re Daigle (Daigle Trucking), Decision No. 44416, Application No. 13506-PP, July 15, 1955.*



Declaratory Judgment Procedure Improper for Review of FPC Order

A FEDERAL district court held that a declaratory judgment procedure is not "the proper vehicle" by which to secure judicial review of orders of the Federal Power Commission or the scope of its statutory authority. The orders in question were under review by the commission. The court said that a natural gas producer-gatherer involved must first secure a ruling by the commission and follow the avenues of judicial review provided in the Natural Gas Act before seeking relief elsewhere.

This was decided in an action by a producer-gatherer of natural gas against a pipeline company to restrain the latter from pursuing proceedings before the

Federal Power Commission, for a declaration of rights under a contract for sale of gas, and for money damages based on the pipeline company's failure to pay the contract price for gas delivered by the producer-gatherer.

The court held that it had jurisdiction to determine the amount to which the producer-gatherer was entitled for gas delivered and whether it acted in good faith in withholding certain gas for recycling. It concluded, however, that it lacked jurisdiction over that portion of the action seeking declaratory and injunctive relief.

The action was deemed to be merely an attempt to secure a court ruling on the validity of Orders 174 and 174-A by

PUBLIC UTILITIES FORTNIGHTLY

which the Federal Power Commission sought to regulate the producer-gatherers. Neither the pleadings nor the evidence disclosed any controversy between the parties as to any matter pertaining to the contract. No question had been raised as to its validity or as to the interpretation

of any of its terms. The only dispute was as to the effect of the promulgation of the commission orders, and whether, by reason of them, the gatherer was compelled to continue serving the pipeline company. *Magnolia Petroleum Co. v. Texas Illinois Nat. Gas Pipeline Co.* 130 F Supp 890.



Action by ICC Not Prerequisite

THE United States court of appeals held that a railroad was not required to apply to the ICC before starting a court action to recover from the government amounts allegedly due for the carriage of equipment as a private carrier. No question of administrative discretion was pre-

sented in the prosecution of such a proceeding, and the court had merely to determine the meaning of words in a tariff used in an ordinary sense and to apply that meaning to undisputed facts. *United States of America v. Louisville & N. R. Co.* 221 F2d 698.

Other Recent Rulings

Interim Telephone Rate Increase. A telephone company was granted an interim rate increase by the Wisconsin commission for the period prior to cutover to automatic dial operation where the additional revenue was required to finance part of the construction program. *Re Maple Teleph. Co.* 2-U-4380, June 16, 1955.

Par Value Reduced. The Massachusetts commission authorized a gas company to reduce the par value of its capital stock from \$25 to \$10, after approval had been secured by a vote of a majority of the stock, where the reduction would result in an improved market and a wider distribution. *Re Fall River Gas Co.* DPU 11345, July 5, 1955.

Jurisdiction over Securities. The New York commission held that it did not have jurisdiction over Western Union Tele-

graph Company's proposal to sell debentures to refund outstanding securities and to finance construction outside of the state. *Re Western Union Teleg. Co.* Case 17298, June 29, 1955.

Nonresident Water Rates. The Kentucky court of appeals held that the establishment of water rates for nonresident consumers of a municipally owned utility was within the jurisdiction of the commission. *City of Covington v. Sohio Petroleum Co.* 279 SW2d 746.

Spread of Rates. The Utah commission commented that it had the duty to find the spread of additional revenue among the different classes of service which would result in rates that meet the statutory test of justness and reasonableness. *Re Southern Utah Power Co.* Case No. 4016, May 27, 1955.

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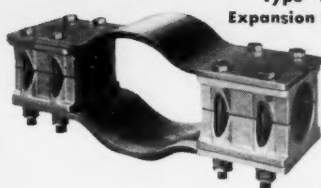
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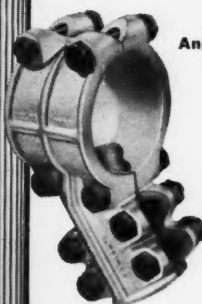
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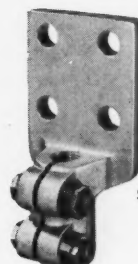
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Q. *Are all modern-day wood preservatives about equal in value?*

A. No, you can't assume that they are because none of the newly introduced preservatives have as yet been tried by the test of time. Creosote, on the other hand, which has been the number one wood preservative for over fifty years, is still number one in customer preference because of its established service record.

Q. *Are all treatment companies about the same — one's as capable as another?*

A. No, all treatment companies are not about the same. Some, such as the American Creosoting Company, which has been in the business for over fifty years, have more experience than others. Some, such as the American Creosoting Company, have had an opportunity to build up a treatment and service organization that is second to none.

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Electronic Analyzer to Control Flow for 9,000-Mile Area

AN electronic brain will absorb a number of routines usually performed by dispatchers of the Ohio Edison system.

The device is being built by Goodyear Aircraft Corp. and will be installed at the company's main dispatching center in Massillon, Ohio. It is a special-purpose adaption of the Goodyear electronic differential analyzer, known as GEDA. Engineers of the power company collaborated with those of Goodyear in designing it.

Ohio Edison's system, with 35 steam-electric generators in nine power plants, stretches from a Pennsylvania area east of Youngstown, Ohio, across Ohio to Akron, Lorain and on down to Springfield in the southwestern part of the state near Dayton—a 9,000-square-mile territory.

Pre-set with basic data, GEDA will make its calculations in a thousandth of a second. When it gets the answer to fit the situation, it will transmit impulses automatically over telephone circuits to manipulate the throttles of the generators it selects—some of them as much as 150 miles away.

Replacement of manual controls by GEDA's automatic, split-second controls will save enough in two years to pay for the cost of the new equipment, Ohio Edison estimates.

"Powerama" to Feature Electro-Mobile Power Unit

HOW electric utility companies can meet peak load problems intensified by such seasonal demands as air conditioning equipment, will be dramatically described to visitors to General Motors "Powerama" in Chicago August 31st to September 25th at an Electro-Motive Division display. A 1,000 kw Electro-Mobile Diesel-electric generating unit, will be demonstrated to show how such impulses as

a voltage drop on the line will cause unit to start automatically and feed current into the line as long as load demands.

The new Electro-Mobile Power Unit, the mobile electric generating plant for public utilities, will be put to practical use since four of them, developing 4000 kilowatts will supply all of the power for lighting and operating exhibits at the Powerama. The outlying power plant thus created is being set up and operated in collaboration with the Commonwealth Edison Company. The mobile plant saves the necessity of temporary extension of power lines from a point two miles distant. This will be the first public display of the new units.

One of the features of the Powerama will be a demonstration several times daily of the remote control of these power units. Visitors will be permitted to start and stop the throbbing 1000 horsepower units by merely dialing a telephone or speaking into a walkie-talkie.

G-E Announces New Bulletin on Nuclear Research Reactors

THE G-E Atomic Power Equipment Department has announced a new bulletin showing complete nuclear research reactor systems the company can supply as a single source.

The bulletin, designated GEA-6326, in eight pages, lists and pictures various reactors and components. It also explains how G-E research reactors can be used in industry, education and research.

\$3½ Million for Electric Expansion In Seashore Area

ATLANTIC City Electric Company is allocating over three and half million of its 1955 construction budget for improvements and additions to its facilities in the resort areas it serves along the southern New Jersey coast.

The company's seashore service territory extends 70 miles from Long Beach Island to Cape May.

Bayard L. England, president of the company reported that new customers and continued greater use of electricity by present customers required acceleration of the company expansion plans. During the first six months of 1955 new construction accounted for 2,871 new customers in the seashore areas, an increase of 15 per cent over the same period in 1954. Kilowatthour use attributed to resort business soared to over 31 million for July alone, an increase of 12 per cent.

Blaw-Knox Bulletin

BLAW-KNOX Transmission Towers are described in a new bulletin, Number 2509, which is available upon request from Structural and Tower Department, Blaw-Knox Company, Pittsburgh, Pa.

Body and leg extensions to both double and single circuit towers, in order to obtain desired height and meet uneven ground conditions, are described in the bulletin. Blaw-Knox Company has been manufacturing towers of all kinds for more than 40 years.

Highway Trailer Appointment

HAROLD J. MEAGHER, president of Highway Trailer Company, Edgerton, Wisconsin, has announced the appointment of Ralph C. Hopkins to the position of sales manager of the company's Utility Division.

Before joining Highway Trailer Company, Mr. Hopkins was employed by United Aircraft Company—Hamilton Standard Propeller Division, East Hartford, Connecticut, for five years as a Field Sales and Service Engineer and for ten years by the Four Wheel Drive Auto Company, Clintonville, Wisconsin, as a Sales Engineer and Western Sales Manager. He also

(Continued on page 28)



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WISCONSIN SOUTHERN GAS CO. capitalizes on their Cleveland "Baby Digger's" compactness and maneuverability on this extension job in Lake Geneva, Wisconsin. Cleveland's quick-shift reversible conveyor made it easy to get around trees, poles and water hydrants and keep trenching operations right on schedule in spite of limited working space.

Year after year after year, Clevelands are the first choice on utility company jobs like this because Cleveland-pioneered features are needed to economically satisfy the varied job requirements called for in gas distribution work.

Recognized as supreme in its field for excellence of design, materials and construction, the Cleveland "Baby Digger's" outstanding record of long-lived dependability and economical performance is attributable primarily to Cleveland's unwavering allegiance to this basic characteristic . . .

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INDUSTRIAL PROGRESS

(Continued)

handled sales for the Eagle Manufacturing Company, a subsidiary of Four Wheel Drive Auto Company, which manufactured products for the public utility and construction fields.

The Utility Division of Highway Trailer sells its products to public utility companies and construction companies throughout the United States and in the export field. The product line consists of utility truck bodies, earth boring machines, pole and cable reel trailers, winches, power take-offs and associated mechanical accessories.

Clark Bros. Designs New Mobile Power Plant for Emergency Use

THE development of a unique, 5500 kilowatt power plant for use in civil emergencies or wartime disaster has been announced by Clark Bros. Co. of Olean, New York, one of the Dresser Industries. This Turbo-Mobile Power plant is mounted in a single railroad car and can be placed in operation after an absolute minimum of preparation. The 5500 KW plant has as its source of power a newly designed combustion gas turbine which is directly connected to a generator.

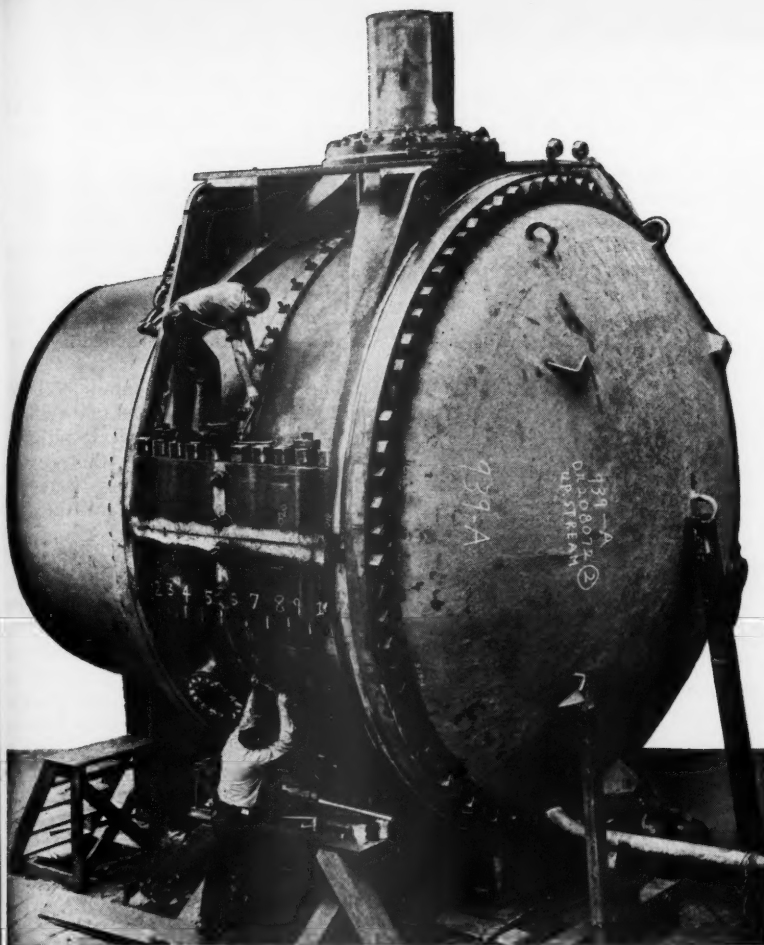
The unit, which has been built for the Bureau of Yards and Docks of the United States Navy is designed specifically as a compact, mobile source of a large amount of electrical power which can be used if an emergency should occur. Even though it is a "portable" unit, the power is of heavy duty design and can be operated continuously no matter what the duration of the emergency may be.

New Booklet on "Scotch" Brand Products for Pipeline Protection

A new, 16-page, illustrated booklet describing applications and giving property data on "Scotch" brand products for pipeline protection has been announced by Minnesota Mining and Manufacturing Co., Dept. E5-229, 900 Fauquier st. St. Paul 6, Minn.

The two-color booklet covers the use of "Scotchrap" brand all-weather pipe wrap tapes Nos. 50 and 51, "Scotchrap" brand pipe primer, and "Scotch" brand filament No. 45 which is used for attaching rock shields to buried pipe. In addition it covers "Scotchfil" electrical insulation putty, "Scotch" brand No. 33 plastic tape, and "Scotch-kote" electrical coating for use in protection of splices in anode ground bed installations where resistance to moisture, fungus and mechanical abrasion is required.

Charts showing complete physical
(Continued on page 30)



This 16-Foot Butterfly Valve illustrates the type of work which Newport News takes in stride. Newport News built 3 such valves, each weighing 446,000 lbs., for the Ross Power Plant, Skagit Project, Department of Light, City of Seattle, Washington. Designed for a water flow of 3,620 cu. ft. per sec., and a hydrostatic pressure of 290 psi., these valves were shop tested by Newport News at 450 psi. They are hydraulically operated with oil at 1,500 psi. pressure. Shop tests assure speedy, trouble-free assembly of Newport News built equipment, on the site.

The TEST of a TITAN

Here is one of the largest high head butterfly valves ever built, undergoing a shop test at Newport News. If you had an opportunity to follow this unit from start to finish, you would see first hand how Newport News produces massive equipment economically. For economy is a basic advantage that results from Newport News' high integration of skill and production facilities.

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and electrical insulating properties for each of the products are included and a wide range of typical pipeline applications are pictured in addition to a brief discussion of each. The booklet may be obtained by writing to the manufacturer at the above address.

I-H Offers "Electrall" Portable Electric Generator

THE "Electrall" portable electric generator developed by International Harvester Company and General Electric Company, will be demonstrated nationally this fall by International dealers and branches. As an attachment for International trucks, the Electrall generating system provides on-the-spot standard 60-cycle power for operating power tools in pioneering, building and construction work, public utility and municipal operations and other fields.

Output of the Electrall, which is operated by power takeoff from the trucks's engine, is 12,500 watts. It will handle up to a 10-horsepower motor, depending on its applications, and has plug-in outlets for alternating current 110 or 220 volt single phase,

or 220 volt three phase.

Weight of the Electrall is 325 pounds. It occupies an area 22 inches long, 20 inches wide and 20 inches high. It can be readily removed from the truck when its use is not required. The Electrall also can be mounted on various International Harvester tractors to furnish power for numerous farm applications.

Southern Coal Appointment

GREGORY S. DeVINE recently became associated with Southern Coal Company, Inc., Chicago, as a vice president, according to an announcement made by T. L. Kelce, executive vice president of Southern.

Greg DeVine, well known coal executive, recently resigned his position as vice president and director of Truax-Traer Coal Company.

In making the announcement, Mr. Kelce said that Mr. DeVine's duties with Southern will be in connection with the general sales and administrative work of the Company.

Active in coal sales in the Chicago area for the past 28 years, Mr. DeVine joined Binkley Coal Company in 1933.

He served as president of Binkley as well as vice president and director of Truax-Traer, following the merger of the two companies.

Cleveland Electric to Build \$17 Million Office Structure

CLEVELAND Electric Illuminating Co. plans to begin construction immediately on a \$17 million office building. The building will be 22 stories high. Completion is scheduled by November, 1957.

The building will contain 400,000 square feet of floor space and will be completely air conditioned. It will feature a two-story lobby with recessed gardens. An underground watering system will water shrubs and trees in the gardens.

Pipeline Expansion Approved

THE Federal Power Commission recently authorized Montana-Dakota Utilities Co. to add some 44 miles of pipeline and 1,090 horsepower in compressor capacity to its natural gas transmission system in South Dakota and Wyoming. The estimated cost is \$1.4 million.

(Continued on page 32)

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AT THE GM POWERAMA— a practical demonstration of **ELECTRO-MOBILE POWER**



Four Electro-Mobile rail units and one highway unit will supply all electric power for 22 acres of exhibits at General Motors' big "World's Fair of Power" on Chicago's Lake Front from Aug. 31 to Sept. 25.

Power for operating displays and night lighting of the "Powerama," biggest industrial exposition of its kind, posed a costly power supply problem for temporary installation to supply a large demand for a relatively short time in an isolated area.

This problem was solved by the use of Electro-Mobile Power, conveniently moved into the exposition site near Soldier Field in cooperation with the Chicago Park District, just a few days ahead of the opening date.

After conclusion of the "Powerama," these units, including two for the Commonwealth Edison Company, will be moved to other locations where they can meet utility needs in a wide variety of economic applications.



ELECTRO-MOTIVE DIVISION

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Commonwealth Edison Puts New 160,000 KW Unit in Service

COMMONWEALTH Edison Company has put another 160,000 kilowatt turbine generator in service at its new Will county station, Willis Gale, chairman, announced recently. The station began operating last March with an initial 160,000 kilowatt unit.

"With a third unit scheduled for completion at State Line station late this year, Commonwealth will add more new generating capacity in 1955 than in any one year in its history," Mr. Gale said.

The State Line unit with the two Will county units, with other changes, will bring the 1955 net addition to 475,000 kilowatts.

A-C Releases 150 C Rise Dry-Type Transformer Bulletin

ALLIS - CHALMERS totally-enclosed dry-type transformers with NEMA Group 3 class insulation for indoor or outdoor applications are described in a new bulletin released by the company. The units are designed for higher temperatures to keep weights and dimensions as low as possible.

Advantages claimed for the dry-type transformers include lower initial cost as compared with oil-filled units, more economical operation and increased production through more efficient operation of machines and better lighting.

Steps in the building of Allis-Chalmers dry-type transformers with NEMA Group 3 class insulation are portrayed in the bulletin. The transformers are available in single phase types (HD) in sizes 50 kva and smaller, and in three phase types (HDT) in sizes 30 kva and smaller, 600 volts and below.

Copies of the bulletin 61B8222 are available on request from Allis-Chalmers Manufacturing Company, 965 S. 70th street, Milwaukee, Wisconsin.

"Direct Line to Decision"

IBM's NEW motion picture, "Direct Line to Decision," was shown recently at the opening of the company's new Data Processing Center. The film stresses the need for expanding management's decision-making capacity. It points out that this can be accomplished if executives receive accurate information on business operations more rapidly. Such timely knowledge

reveals to management opportunities to develop new products, create new markets, reduce expenses, and employ resources and manpower more efficiently.

The film then demonstrates how a system of electronic data processing machines can bring about such a step-up in the flow of vital business information. All of the machines now installed in IBM's new center are featured in the presentation.

"Direct Line to Decision" was produced for IBM by the Raphael G. Wolff Studios of Hollywood. The 16mm film is available, free of charge on a loan basis, from any of IBM's 189 branch offices located in major cities throughout the country.

Texas Eastern Plan Greater Flexibility for Phila.-N. J. Area

TEXAS Eastern Transmission Corporation and Texas Eastern Pennsylvania Transmission Corporation have received authorization from the Federal Power Commission on a joint application to shift 10,000 horsepower presently installed or authorized for construction on the Texas Eastern system to the Penn-Jersey system, and to construct additional horsepower on the Texas Eastern system and two small loop lines in the Philadelphia area, according to an announcement by George T. Naff, president. The cost of the project is estimated at \$2,597,400 for Texas Eastern Transmission Corporation and \$2,836,000 for Penn-Jersey.

Construction will begin on this project as soon as possible, and it is expected that the entire program will be completed by the end of the year. The new facilities will give Texas Eastern greater flexibility in its Philadelphia-New Jersey delivery area, and will permit deliveries in that area of larger quantities of gas on peak days.

Westinghouse Building Huge Steam Plant for Philadelphia Elec.

ONE of the world's largest and most efficient steam electric turbine-generators, a super-critical pressure unit with a nominal rating of 325,000 kilowatts to be installed by the Philadelphia Electric Co. in a new generating station now under construction in the Philadelphia area, is being built by the Westinghouse Electric Corporation. Work is already under way on the project.

Originally planned and announced last year as a 275,000-kilowatt unit, the new steam-electric plant will represent

an initial investment of more than \$45,000,000. The unit will be installed in a new power station located at Eddystone, Pa. It will operate at higher steam pressure and temperature and will produce more kilowatt-hours from a single boiler-turbine unit than any existing or projected power plant in the world.

The new super-critical pressure steam turbine generator unit is being built by Westinghouse at its South Philadelphia and East Pittsburgh Works.

The unit is scheduled for delivery in 1958. It is expected to be placed in operation sometime during 1959.

New Worthington Bulletin

FEATHER Valve Compressors from 75 to 350 Horsepower is subject of new Bulletin by Worthington Corporation.

Fourteen major advantages on installation, operation and maintenance costs are outlined for types YC and DYC Compressors. Information and illustrations are offered on component parts including frame, running gear parts, intercooler, crosshead, motor and main bearings and various full-page cutaway views are included.

For further information or copies address requests to Worthington Corporation, Advertising & Sales Promotion Dept., Harrison, New Jersey, specifying Bulletin No. L-676-B1A.

Pacific Power & Light Plans Three Lines

PLANS for construction of three major transmission links and a Wyoming steam power plant were announced recently by Paul B. McKee, president of Pacific Power & Light Company.

One of the new 115-kv. transmission circuits will complete connection between the company's Clatsop and Tillamook districts. A similar heavy-duty line will be built through the Yakima valley from Union Gap to Grandview, and the third transmission project is under way in Montana to connect the company's system at Libby with the Bonneville power administration's substation at Troy.

Because of growing power loads in Wyoming and the limited opportunity for additional hydroelectric development in that state, the company is taking initial steps toward construction of a steam plant in the area. Mr. McKee stated. The project will be planned for completion in 1958.

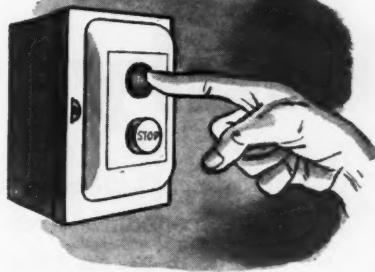
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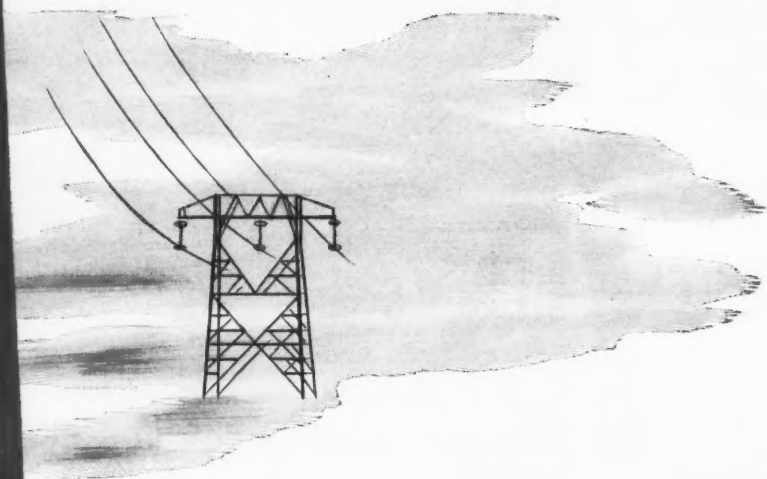
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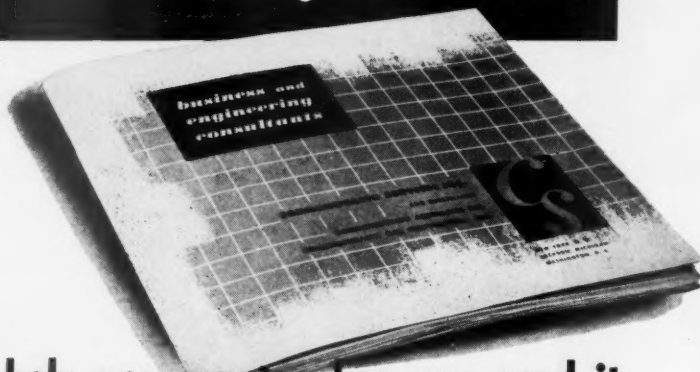


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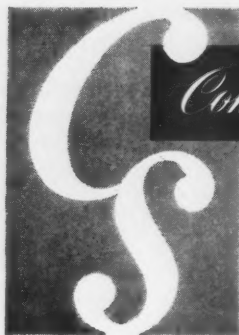
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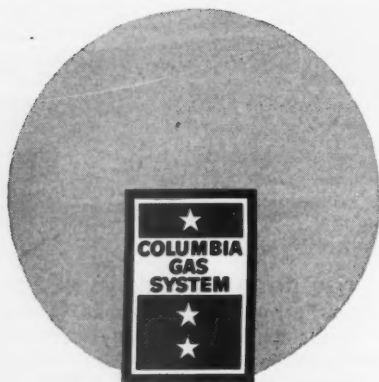
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A	
Abrams Aerial Survey Corporation	43
*Allen & Company	
*Allis-Chalmers Manufacturing Company	
American Appraisal Company, The	39
American Creosoting Company	26
*American Telephone & Telegraph Company	
Analysts Journal, The	34
B	
Babcock & Wilcox Company, The	4-7
Black & Veatch, Consulting Engineers	39
*Blyth & Company, Inc.	
C	
Carter, Earl L., Consulting Engineer	43
Cleveland Trencher Co., The	28
Columbia Gas System, Inc.	38
Commonwealth Associates, Inc.	36
Commonwealth Services, Inc.	36
Consolidated Gas and Service Co.	43
D	
Day & Zimmermann, Inc., Engineers	39
Delta-Star Electric Division, H. K. Porter Co., Inc.	25
Divco Corporation	16-17
Dodge Division of Chrysler Corp.	37
Drake & Townsend, Inc.	39
Dresser Industries, Inc.	Outside Back Cover
E	
Ebasco Services, Incorporated	35
Electro-Motive Division, General Motors	31
F	
*First Boston Corporation, The	
Fluor Corporation, Ltd., The	40
Ford Bacon & Davis, Inc., Engineers	40
*Foster Wheeler Corporation	
G	
Gannett Fleming Corddry and Carpenter, Inc.	43
General Electric Company	13, 20-21
Gibbs & Hill, Inc., Consulting Engineers	40
Gilbert Associates, Inc., Engineers	40
Gilman, W. C., & Company, Engineers	40
*Glore, Forgan & Co.	
*Guaranty Trust Company of New York	
H	
Haberly, Francis S., Consulting Engineer	43
*Halsey, Stuart & Company, Inc.	
*Harriman Ripley & Co.	
Hill, Cyrus G., Engineers	40
*Hill, Hubbell and Company	
Hirsch, Gustav, Organization, Inc.	41
Hoosier Engineering Company	41
I	
International Harvester Company, Inc.	Inside Back Cover
Irving Trust Company	18
J	
Jackson & Moreland, Engineers	43
Jensen, Bowen & Farrell, Engineers	41
K	
*Kellogg, M. W., Company, The	
*Kidder, Peabody & Co.	
*Kuhn, Loeb & Co.	
Kuljian Corporation, The	41
L	
*Langley, W. C., & Co.	
Leffler, William S., Engineers Associated	41
*Lehman Brothers	
*Loeb (Carl M.), Rhoades & Co.	
Loftus, Peter F., Corporation	43
Lougee, N. A., & Company, Engineers	41
Lucas & Luick, Engineers	43
Lutz & May, Consulting Engineers	43
M	
*Main, Chas. T., Inc., Engineers	
Martin Publications	33
*Matthews, Jas. H., & Company	
*McCabe-Powers Auto Body Company	
*Merrill Lynch, Pierce, Fenner & Beane	
Middle West Service Co.	42
Miner and Miner	43
*Morgan Stanley & Company	
Motorola Communications & Electronics, Inc.	
	Inside Front Cover
N	
*National Association of Railroad & Utilities Commissioners	
Newport News Shipbuilding & Dry Dock Company	29
*Nuclear Development Associates, Inc.	
P	
Pioneer Service & Engineering Company	15, 42
R	
Recording & Statistical Corporation	11
Remington Rand Div. of Sperry Rand Corp.	9
Robertson, H. H., Company	24
*Rust Engineering Company, The	
S	
S & C Electric Company	22-23
Sanderson & Porter, Engineers	42
Sargent & Lundy, Engineers	42
Schulman, A. S., Electric Co., Engineers	43
Sloan, Cook & Lowe, Consulting Engineers	43
*Smith, Barney & Co.	
*Southern Coal Company, Inc.	
*Sprague Meter Company, The	
T	
*Texas Eastern Transmission Corporation	
U	
*Union Securities Corporation	
United States Steel Corporation	19
W	
*Western Precipitation Corporation	
White, J. G., Engineering Corporation, The	42
Whitman, Requardt and Associates	42

Professional Directory 39-43

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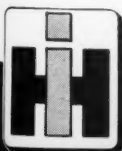
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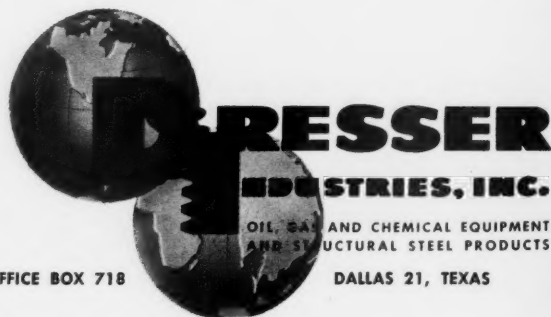
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